



THE NEW
MANAGRA '60

UNIVERSITY OF MANITOBA

STUDENTS' PUBLICATION, FACULTY OF AGRICULTURE

VOL. V

MANITOBA POOL ELEVATORS



**"FARM CO-OPERATIVES
MUST KEEP STEP
WITH THE CHANGING
TIMES"**

*"Light is the task where
many share the toil."*

**FARM
PROBLEMS**

THE CHANGING RURAL COMMUNITY

THE COST PRICE SQUEEZE

INTEGRATION

CONTRACT FARMING

FARM SURPLUSES

GREATER OUTPUT

FEWER FARMERS

LARGER FARMS

GREATER CAPITALIZATION

MORE MACHINERY

EXTENSION

RESEARCH

The New Managra

BRUNO G. LAGACE
Editor

*

EUGENE HOGUE
Assistant Editor

*

ED TYRCHNIEWICZ
Literary Editor

*

HAROLD GRUNDY
Advertising Manager

*

MELVIN WEBBER
Business Manager

*

NEIL CAMERON
Circulation Manager

*

DAVE ASHTON
Sports Reporter

*

LOUIS LENZ
Photographer

*

Frontispiece photos
courtesy of

The Cooperator
and

The Winnipeg Free Press

VOLUME V

APRIL, 1960

CONTENTS

EDITORIALS	Page
Editorial	5
The Minister's Message.....	7
The Dean's Message.....	9
The Senior Stick Speaks.....	11
Responsibility.....By Dean J.R. Weir	13

THE GRADUATES AND THEIR CHALLENGE

Degree Graduates.....	18
Diploma Graduates.....	21
Training for Tomorrow.....By Prof. E.H. Lange	24
A Career in Extension.....By D.C. Foster	27
Industry for Graduates.....By Fred Hamilton	29
Research.....By W.E. Sackston	31

STUDENT LIFE

The Winter Fair.....John Neabel	38
Social Life.....Dewitt Mullin	42
In The Sportlite.....Dave Ashton	46
Literary and Debating.....Wilf Holtman	48

COUP D'OEIL

Economics for Legislators.....By Dr. R. Triffon	53
Your Farm's Fate.....By Chuck Framingham	56
Destiny and Nature.....By Richard Hamilton	57
Diploma Summer Trip.....By Tom Hawkins	58

INDEX TO ADVERTISERS.....	64
---------------------------	----

United Grain Growers

LIMITED

now in its second half century. U.G.G. views with pride a record of service to the farmer dating back to 1906. Our services include

Courteous and efficient handling of the producers' grain.

High quality farm supplies at prices designed to save.

Prompt and reliable insurance services in all farm fields except "Life."

Grants to Education and Research.

United Grain Growers

LIMITED

CALGARY

EDMONTON

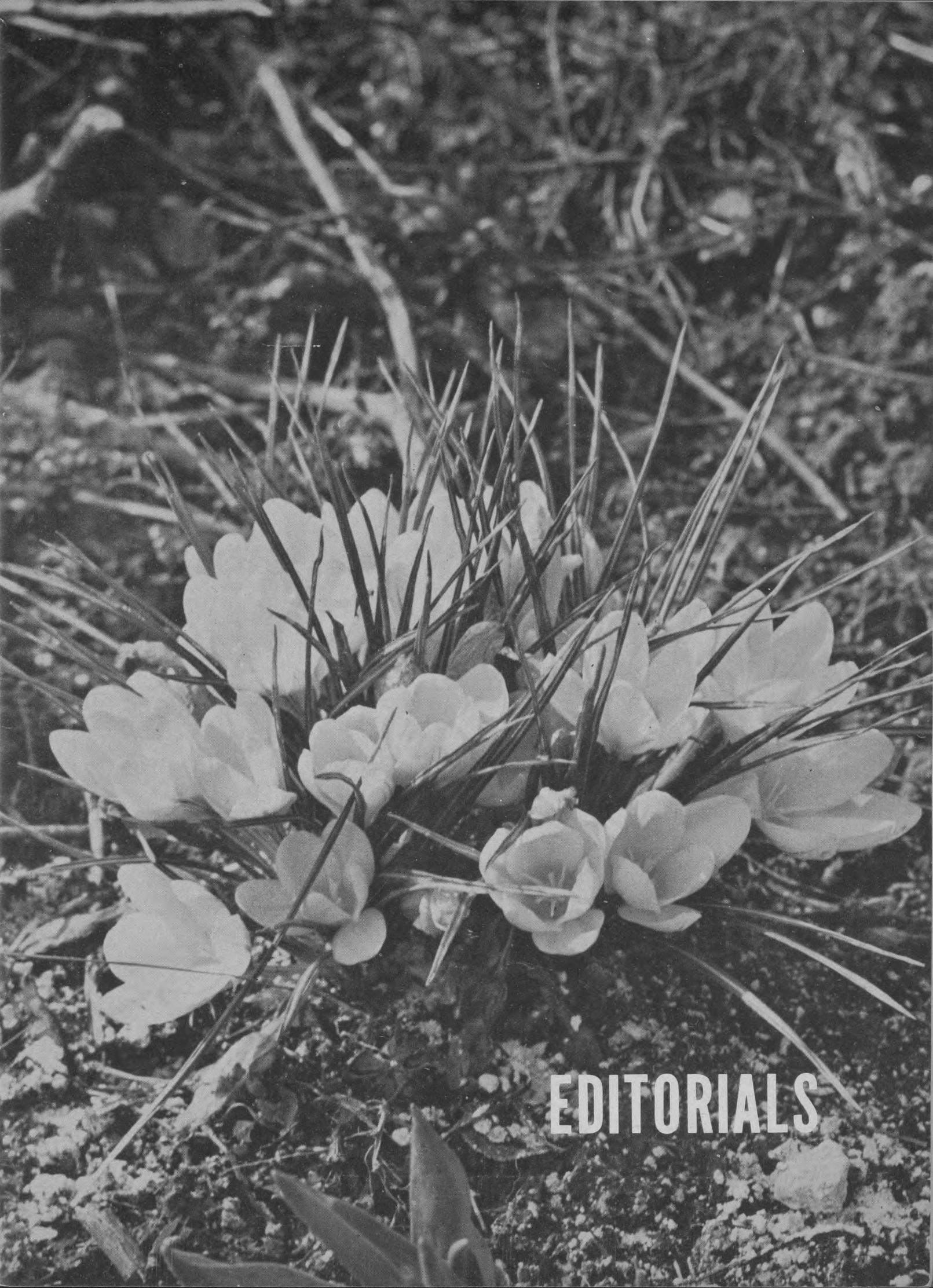
REGINA

SASKATOON

PORT ARTHUR

VANCOUVER

HEAD OFFICE: WINNIPEG



EDITORIALS

Congratulations to . . .

AGGIE GRADUATES

"MIRACLE" FEEDS DIVISION

OF

THE OGILVIE FLOUR MILLS CO. LIMITED

WINNIPEG — EDMONTON — MEDICINE HAT



CONGRATULATIONS

AND

BEST WISHES



Compliments of

INTERNATIONAL HARVESTER

OF CANADA LTD.

Compliments of . . .



MARCHANT CALCULATORS, LTD.

EDITORIAL

The Faculty of Agriculture presents to you its official yearbook, the New Managra. For the graduate, this publication is a souvenir of his great four year experience. For the undergraduate and all the young men interested in our Faculty, this is an invitation for them to come and taste the fruit of knowledge and satisfy themselves with an education that can do so much to promote the good of the farmer, the province and the country. Finally, for everyone reading this publication, there is an attempt to set before their eyes the Faculty and the profession of Agriculture.

To anyone, man without a challenge is man without an ideal. To the graduate there exists an ideal that is far beyond the B.S.A. he has now received. It is an accomplishment, but the ideal remains with its challenge. This yearbook has based itself on the theme: "Agriculture, challenge to the young man seeking success." Challenge in extension, challenge in industry, challenge in re-

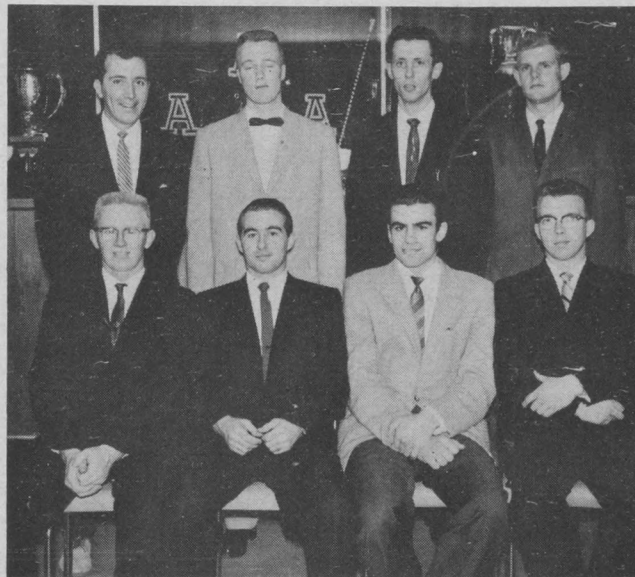
search, challenge in politics, challenge on the farm; all are depicted in the most vivid way. Devour these articles, they are filled with stimulus and incentive. All of them offer to the Plant, Animal, Dairy, Poultry, Soil scientist, to the Engineer, the Economist, the Entomologist, a motive towards success.

We should like to express our sincere thanks to the Hon. George Hutton, to Dean J. R. Weir and Prof. Lange for the kind interest and collaboration they have given us.

Our deepest appreciation to Mr. D. C. Foster, Mr. Fred Hamilton, Dr. W. E. Sackston, to all members of the Faculty and the student body who contributed by their writings or their ideas to the success of this yearbook.

To all our graduates, we wish the best of success; may your ideal carry you beyond the unknown.

BRUNO G. LAGACE, Editor.



Managra Staff - (Back Row) - Louis Lenz, Melvin Webber, Harold Grundy, Dave Ashton.
Front Row - Ed Tyrchniewicz, Eugene Hogue, Bruno Lagace, Neil Cameron.

Our Congratulations to the Agricultural Graduates of 1960



Manitoba Agriculture is faced with an unprecedented challenge. Farm people in our province are disillusioned and discouraged because:

In 1948, while 46 percent of our Cash Income was required for operating costs, ten years later (in 1958) in spite of the pronounced increases in efficiency, 62 percent of the Cash Income went towards operating costs.

In 1948, Manitoba total farm Cash Income was \$247.2 million, while in 1958 it had declined to \$229.0 million --- a loss of \$18 million, during a period when Manitoba farmers increased production in

Cattle - 26%	Calves - 11%	Hogs - 78%
Poultry - 68%	Eggs - 38%	Grains - 16%

Since price control days of the 1941-45 period, farm production costs increased 90% while farm product prices increased only 25%. At the same time, general wholesale prices increased 82%, and fully and chiefly manufactured goods increased 92%.

**THE REMEDY FOR THESE UNFAVORABLE AND CHALLENGING CONDITIONS
IS A SUCCESSFUL AND EFFECTIVE OCCUPATIONAL
FARM ORGANIZATION.**

AGRICULTURAL STABILITY --- MEANS --- ECONOMIC PROSPERITY

THE MANITOBA FARMERS' UNION



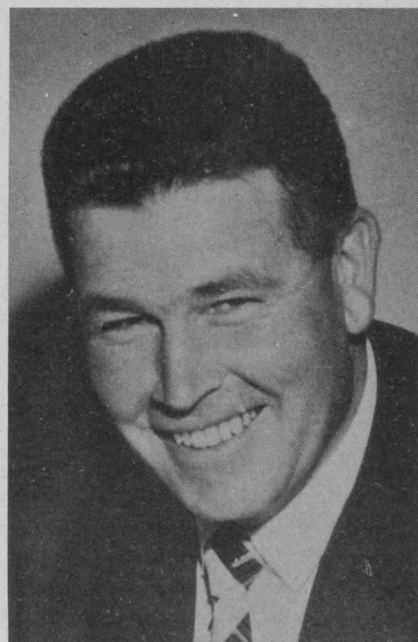
Official Publication:—THE VOICE OF THE FARMER
Circulation 12,000, published monthly, available to Members
and Non-Members

Rates per year: \$1.00 in Canada; \$2.00 Foreign



The Minister's Message

By GEORGE HUTTON
Minister of Agriculture and Conservation



I appreciate this opportunity to extend to the undergraduates and graduates of the Faculty of Agriculture, University of Manitoba, greetings and good wishes from the Department of Agriculture and the Manitoba Government.

At no time in the history of the west and that of Manitoba in particular, has agriculture been influenced as it is today, by the work that you and others like yourselves and your counterparts in other places, have undertaken and accomplished in the past decade.

The strides made by professional agriculture in the fields of fundamental research, applied research and experimentation have had tremendous impact upon the farm economy and the farm community. Your success has solved many problems. It has posed additional problems. Your assault on the strongholds of famine and want have been so successful that you may sometimes face the anomalous accusation that you have replaced the fear of those dread spectres by that of plenty and surplus.

In any event, your success in the field of agricultural production has pointed up the urgency of finding solutions to problems associated with the new productivity and new methods of farm management.

We in the Manitoba Department of Agriculture follow with keen interest the progress being made by the Department of Agricultural Economics in its consideration of some of the perennial problems of Mani-

toba farmers. Whatever particular phase you may be engaged in or contemplate being engaged in, The Government of Manitoba recognizes the contribution that you can make and must make if we are to meet and overcome the problems that face us. In spite of your phenomenal success in the past there is no lack of challenge in the future. The next decade offers many problems but also the opportunity to attack them. I foresee a steady expansion in the programs carried by our Department and change in emphasis on various aspects of our programs. This is necessary if we are to have a dynamic useful service to offer to a dynamic farming community. Extension work will not only continue but will grow in importance if the work that is carried on at the University is to be of value to the farmers of this province. More consideration, more emphasis must be placed upon communications. More emphasis must be placed upon giving the type of training and acquiring the type of personality that will give the leadership which will be needed in the future. The integrity and dedication of the members of my staff has made an indelible impression upon me. These are qualities which will be at a premium if we are to succeed in the future and it may well be that it has been the challenge posed by Agriculture that has developed them.

I wish you success wherever you are, whatever you may be doing. May you have good health, good heart and good luck.



"They left us a legacy greater than any gold . . . miles upon miles of Western Prairie . . . awaiting seed time and harvest"

A SCENE FROM

"Prairie Conquest"

a color movie of Western Canada's epic story — produced by National Grain.

The tribulations of our pioneers have become a legend in the Prairie Provinces. Their courage and pride set the standards for our present leading place in world grain production.

SERVING AGRICULTURE
National Grain
 COMPANY LIMITED
 WINNIPEG REGINA SASKATOON CALGARY EDMONTON

CANADA'S FIRST . . .

Our Wonderful World

A Progressive Anthology for those entering the Teaching Profession
 A comprehensive encyclopaedia beautifully illustrated throughout, that brings you a thematic arrangement of valuable information.

Our Wonderful World Research Service

A valuable personal service that provides specific help and information on a wide variety of questions concerning your home and family and school work, and brings you detailed answers prepared for you individually by a staff of experts and counsellors.

SUBSCRIPTION DEPT.

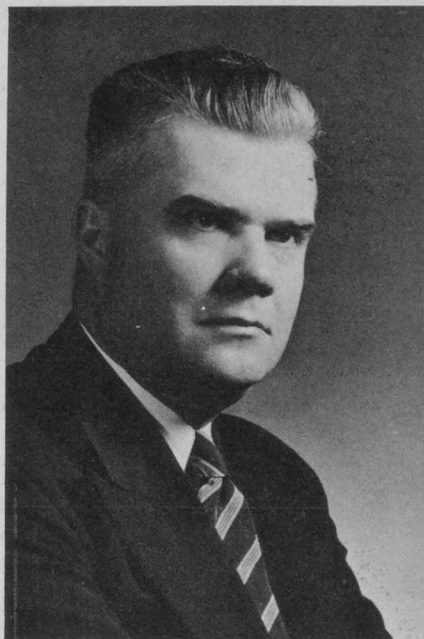
North American Educational Guild Ltd.

66 King Street

Phone WHitehall 3-6575

Winnipeg, Man.

The Dean's Message



By DEAN J. R. WEIR

Dean of the Faculty of Agriculture
and Home Economics

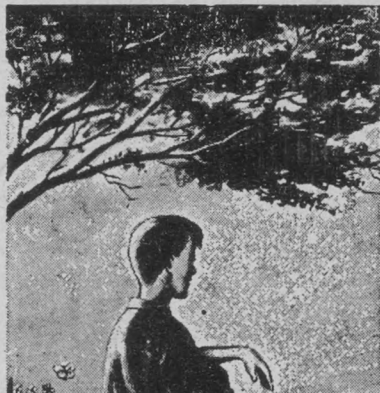
The beginning of a new decade usually inspires some reflections of the past few years and some thoughts for the future. One of the most significant events of the past ten years was the celebration in 1956 of the Golden Jubilee of formal agricultural education in Manitoba. Other accomplishments of importance were the major changes and increases in the Faculty's teaching and research staff, larger research grants and improved facilities, and the implementation of a major revision of both the Degree and Diploma Courses in Agriculture. The past few years have also seen an increase in student enrolment in our Faculty and we sincerely hope enrolment will continue to rise.

The future appears to promise still further changes and accomplishments. Plans for a major building programme in the

Faculty are now well advanced and it is expected that the next few years will see the actual construction of these units and a substantial increase in the research programme. The development of a new University Farm should greatly improve facilities for applied research in the Faculty.

Future graduates in Agriculture will have many opportunities to meet new challenges which will tax their ability and resourcefulness to the utmost. We hope that those of you who graduate this Spring will obtain interesting and rewarding positions and we will watch your progress with keen interest. To those who must complete further work before receiving their degrees, we wish a pleasant and profitable vacation and a safe return to your studies next Autumn.

WHEN I GROW UP. . .



"Sharp and clear are the dreams of the young . . . and always framed in gold."

**TODAY, MORE THAN
EVER BEFORE,
THEY HAVE A
RIGHT TO BE.**

Canada, since birth, has made progress unmatched in world history. Science has tapped the secrets of nature to enable men to live longer and more comfortably. Air travel has reduced the globe to a mere fraction of its former size. Television has brought the sights and sounds of far-away places into the family living room.

During these years Canadian farmers have felt the wind of change and did, in fact, help generate some of them. They swapped their horses and mules for tractors, trucks and autos, their coal oil lamps for mazda bulbs. They put discoveries of the laboratory to work in their fields and feed lots. But as they accepted science's gifts, farmers created for themselves new economic problems. In the solution of these they turn more and more to Co-operatives. Co-operatives have proved that they help build better local communities. Their challenge of the future is to prove that they can build a better world community.

Those of us who have benefitted through co-operatives founded by others, should make sure they continue strong . . . to benefit our sons and daughters. It is our responsibility to

SAFEGUARD THEIR FUTURE BY

Building Co-operatives Today!

BEST WISHES TO THE CLASS OF '60 ON BEHALF OF

The Consumer Co-Op In Your Community from

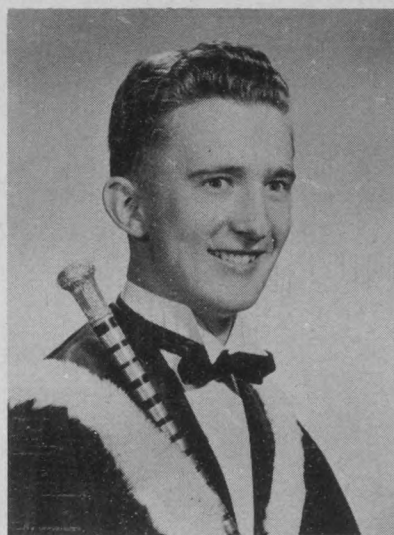
FEDERATED CO-OPERATIVES LIMITED
REGINA SASKATOON WINNIPEG

Senior Stick Speaks

As the 1960 term draws to a close and we look back on the accomplishments of our faculty, we can note with satisfaction that once again our students have been active in both inter- and intra-faculty events, entering all activities with the spirit of friendliness, good sportsmanship and co-operation which has become an "Aggie" tradition.

This year has marked several "firsts" for our faculty. The publication of a student newsletter has been a major step in the continual struggle toward that nebulous goal, "faculty spirit". Another first — for several years at any rate — was the participation of "Aggie" students in the Inter-faculty Drama Festival. These two "firsts" mark an increase in faculty and university spirit by our students. This is fine, this is how we wish our students to participate, this will do much to increase the status of our faculty on campus. However, a word of caution here. Let's not try running before we can walk, let's begin slowly and with certainty, mastering one activity then entering additional ones, and let us never forget that extra-curricular activities must always remain secondary to the education for which we entered university.

I would like to take this opportunity to thank sincerely the members of council and those students who have given freely of their time and talents to further student activities. It has been a pleasure working with you and I hope you have profitted from these experiences. The Council has



certainly benefitted from the advice and guidance of our Honorary President, Prof. G. Hodgson; Dean J. R. Weir; Prof. E. H. Lange; and other staff members. Their assistance with student affairs has been greatly appreciated.

I would like to thank the student body for having given me the opportunity to serve as your Senior Stick. It is an honour which I shall always remember and an experience which will be of immeasurable benefit to me in the future.

To my successor and other newly elected council members may I extend congratulations. If the same spirit of good-fellowship and co-operation prevails, you may look ahead to a very successful 1960-61.

"To strive, to seek, to find, but not to yield
These three lead life to sovereign power."

GARRY WORKMAN.



AGRICULTURE STUDENTS' COUNCIL

BACK ROW - Jack Manns, Jack Steedsman, Wilf Holtmann, Hack Heise, Lynn Chambers, Brian Ransom, Rich Klassen, Rich Hamilton, Bruno Lagace.

CENTRE ROW - Fred Eslingner, Gill Shaw, Ken Johnstone, Dave Hay, Al Henuset, Bryan Zilkey, Laury - Brisson, Gordon McPhee, Don Stammen.

FRONT ROW - Dewitt Mullin, Chuck Framingham, Dr. Hudgson, Garry Workman, Carlyle McDougall, Gerald McDonald, John Neabel.

"Over 40 Years' Experience in Design and Manufacture of Grain Cleaning Equipment for Farm and Industry in Western Canada."

- No. 245 CARTER SEED CLEANERS
- CARTER DISC SEPARATORS
- BULLDOG FANNING MILLS
- VIKING COMBINATION MILLS
- HART INDENT CLEANERS
- HART UNI-FLOW SEPARATORS
- CARTER DOCKAGE TESTERS
- HART EMERSON DOCKAGE TESTERS

Hart Emerson Simon Ltd.

WINNIPEG — P.O. BOX 488 — CANADA



Manufacturers of

HARROWS

WAGONS

HARROW DRAWBARS

FIELD CROP SPRAYERS

GRAIN STORAGE BINS

GRAIN LOADERS

CULTIVATOR SHOVELS

675 Washington Ave.

WINNIPEG 5

MANITOBA

KEYLINE CHICKS

Your Key To Poultry Profits

Developed in Manitoba to give top results under Canadian conditions.

We supply either the stock to produce these special crosses or the crosses themselves.

We also supply M-Group and other Pedigreed or Female grades of Breeding stock in most of the popular breeds. Our supply flocks receive repeated injections to insure C R D free chicks.

All inquiries answered promptly. Drop in or write for a 1959 catalogue.

R.O.P. Breeders Hatchery

533 LOGAN AVE., WINNIPEG

RESPONSIBILITY

By J. R. WEIR

Every person who owes his life to civilized society and who has enjoyed since his childhood its very costly protections and advantages should take, at reasonable intervals, an evaluation of his personal responsibilities. This is particularly true, I believe, when we are approaching the end of our formal academic training and have prepared ourselves to accept positions of importance in our society and in our profession. It is at this time that we are searching for some yardsticks by which we might measure our sense of value.

One of the major aims of our educational system is to establish within individuals a set of ideals from which they may develop a sense of values. In my opinion, this far exceeds in importance the acquiring of factual information or the development of technical methods and skills and this has never been more urgently needed in our society than it is at the present time, for the following reasons: Technological developments have revolutionized our manner of living at such a rate that it has produced tremendous pressure on various aspects of our social adjustment. In no area has this been more keenly felt than in Agriculture, especially among those people who are engaged in the production section of the industry. Situations are continually developing in which critical decisions affecting the future of many individuals have to be made; therefore, responsible leaders, educated and properly motivated to discharge their duties intelligently, are desperately needed. Emotional appeals, intimidation practices, and irrational statements — based on a traditional pastoral philosophy and no substitution for factual information and a reasoned policy — have arisen through failure to accept responsibility in the guidance and direction of our enterprise. Decisions based on faulty or biased information influenced by an unsound set of values often may return to plague the originator and create new and additional problems many times worse than the original situation.

Here are the reasons for the desirability of developing a sound sense of values, why then is this sense of values, this personal code, such a rare thing today? The difficulty appears to stem from a reactionary movement from a rather spartan sense of pioneering standards towards a trend supporting individual conformity and mediocrity. We

seem to have placed a premium in our society on those things associated with security and wealth rather than the accomplishments of every individual. The social climate in which we live today seems to oppose the development of initiative and responsibility. A well-known college principal recently observed that many students entered his residential school with a keen desire to excel but left its walls willing to adjust to a mediocre and conformist society.

Surely the establishing of a sound foundation begins in the home environment. It is here that guidance is so necessary for proper attitudes towards religious and social responsibilities. This, however, is not the rule in most of our modern homes. Rather than develop a healthy philosophy at home which might nurture and encourage the individual potential of our young people we permit this important responsibility to fall into other hands which have become so powerful through modern mass communications. These play upon the emotional responses of our young people and assist in forming patterns of values which are not likely to be too reliable when the pressure of responsibilities develop.

Under these conditions, therefore, there should be little surprise that such an environment has produced a society in which a football coach would be better known than a university president or senior statesman or that a hero of a championship game be publicly recognized and generously awarded while a distinguished scholar remains in obscurity, without tribute. If this is an indication of our sense of values, then our responsibilities will be differently defined than that society which puts a premium on more worthy things.

If, as individuals, we are not willing to devote a fair share of our time to the holding of responsible offices within our community but permit these responsibilities to be passed on to organizations at a provincial level, then we will lose control of our local affairs. As a matter of fact, we have seen the almost complete disappearance of municipal government as an effective body and with this the loss of an excellent local training ground for responsible leaders. The same forces which worked so efficiently in creating this situation are becoming prevalent at the provincial level of government.

continued on page 15
PAGE 13

**BE WISE
USE B-Y'S SEEDS**

BRETT-YOUNG SEEDS LIMITED
WINNIPEG

COMPLIMENTS OF . . .

Buffalo Farm Equipment Supply Ltd.

Division of

**BUFFALO SHEET METAL
WORKS LIMITED**

Established 1910

251-253 Princess St.

Winnipeg, Man.

WITH THE COMPLIMENTS OF

Palm
DAIRIES LIMITED

COMPLIMENTS OF . . .

**FEDERAL GRAIN
LIMITED**

WINNIPEG, MAN.

COMPLIMENTS OF . . .

Crescent Creamery Limited

Dealers in

"QUALITY GUARDED" DAIRY PRODUCTS
FOR OVER 54 YEARS

MILK - CREAM - BUTTER - ICE CREAM

Telephone SU 3-7101 for Daily Service



COMPLIMENTS OF THE

PEOPLE'S CO-OPERATIVE LIMITED

CREAMERY PRODUCTS

FUEL AND FUEL OIL

**610 Dufferin Ave.
Ph. JUstice 9-8354**

**Pritchard and Battery
Ph. JUstice 9-6336**

CONSUMER OWNED — CONSUMER OPERATED

RESPONSIBILITY - -

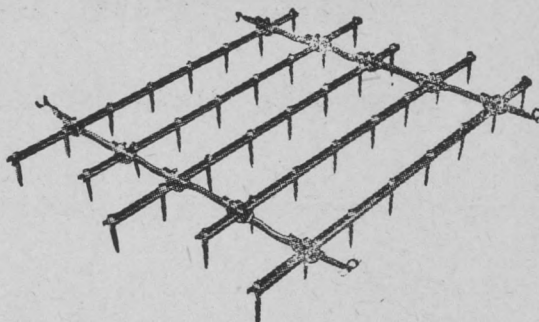
continued from page 13

Many important issues which have traditionally been the responsibility of provincial government and which should still be best decided at this level are rapidly being shifted to federal control. Thus, in our effort to avoid meeting our real responsibilities at the proper times and in the proper places, we are willing to sacrifice a considerable portion of our freedom.

It is when this situation develops to a certain level and some of our standards become threatened that we suddenly look for remedial action. Too late it is realized that the authority necessary for desired changes no longer lies within our control. Frustration develops and actions are taken which are not too soundly based or realistic in concept.

As students, we must establish our own set of values very early in our academic career. We must then dedicate ourselves to this our personal code and practice those acts of responsibility necessary to maintain its standards. Our ancestors established for themselves a set of moral and physical values tailored for a pioneering climate and on this built an energetic and prosperous nation. The main roots of these values consisted of rugged individualism and a deep sense of community responsibility. We must add to these the wisdom and knowledge which research and experience have provided us and in our native social climate redefine our values and crusade for a resurgence of a sense of deep personal and public responsibility.

First Choice in the West *Malco* HARROW EQUIPMENT



- DIAMOND AND FLEXIBLE HARROWS
- ROLLING HARROW DRAWBARS
- ALL STEEL DRAG DRAWBARS
- REPLACEMENT HARROW TEETH

Manufactured By:

**MALMGREN IMPLEMENT
MFG. CO. (MAN.) LTD.**

St. Boniface

Manitoba

Modern in Trend . . .

. . . is the attitude of the Student and should be the attitude of the Farmer.

. . . Modern production methods are needed if costs are to be kept down and business remain profitable.

Modern Farmer

Will keep you posted on the latest methods for your farming program.

Subscription Price \$2.00 to Farmers

171 McDermot Avenue

Winnipeg

Compliments of . . .

Manitoba Packing Limited

HORSE MEAT AND FUR ANIMAL FOOD

607 Dawson Road

ST. BONIFACE, MANITOBA

Best Wishes to the Graduates in Agriculture

CHIPMAN CHEMICALS LIMITED

MONTREAL - HAMILTON - WINNIPEG - SASKATOON - EDMONTON

COMPLIMENTS OF . . .

ARMSTRONG COMMISSION CO. LTD.

Livestock Commission Agents

UNION STOCKYARDS — ST. BONIFACE, MAN.

"SERVING THE PRODUCER SINCE 1923"

Office—CHapel 7-2501 — CEdar 3-4578

Yard—CHapel 7-3741



CLOVER CREST HONEY

Winnipeg 12

-

-

-

-

Manitoba

COMPLIMENTS OF THE . . .

UNIVERSITY BARBER

Your Friendly Barber on Campus

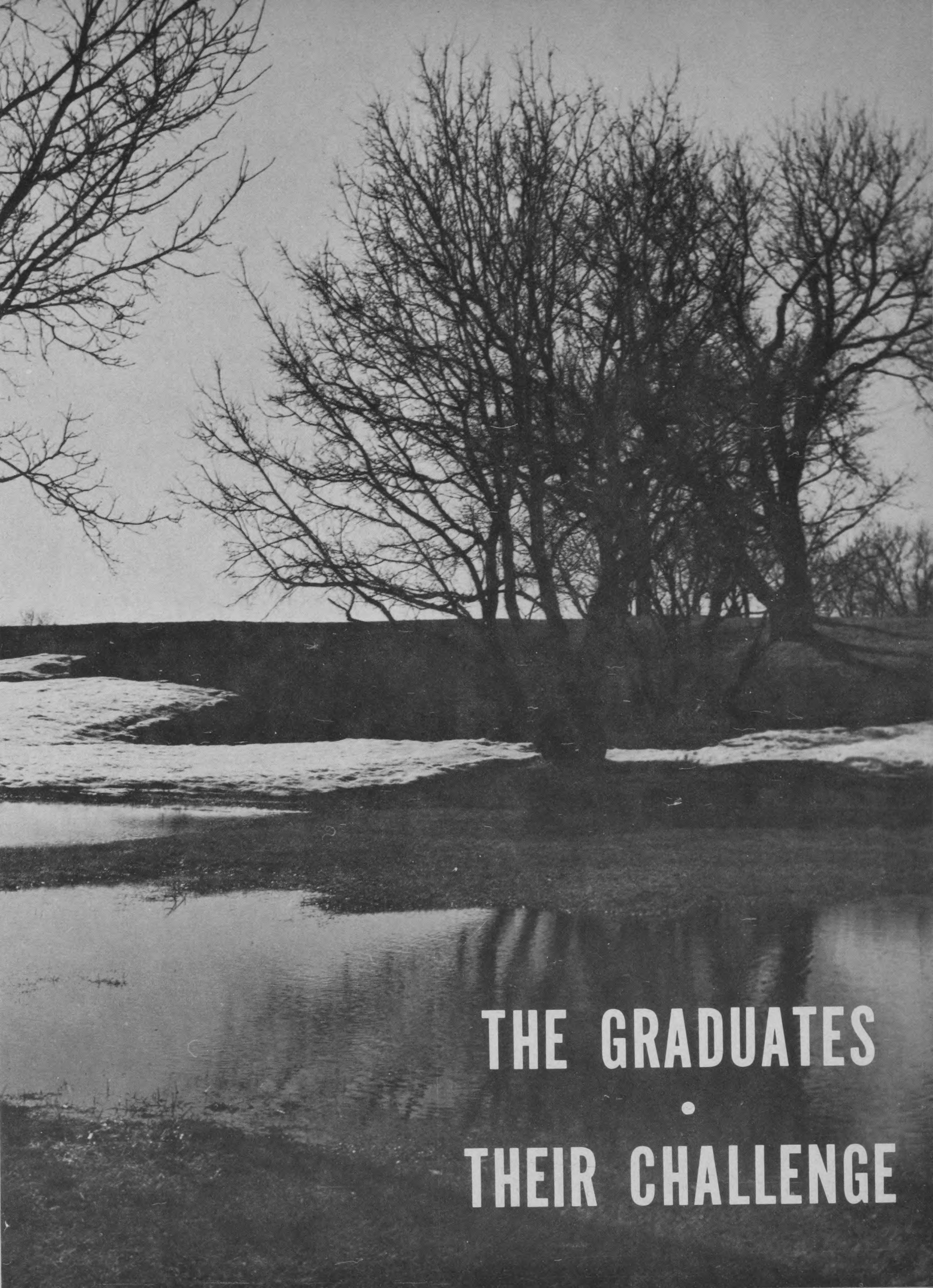
**Your Crossland Headquarters
Dealers For:**

NEW HOLLAND - MINNEAPOLIS-MOLINE

ARMYTAGE

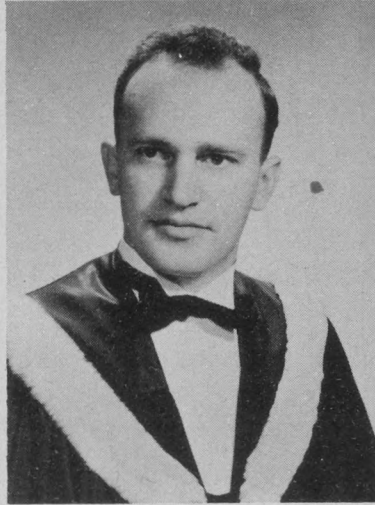
FARM AND AUTO SERVICE LTD.

**Cor. PEMBINA HWY. and
CORYDON AVE.**



THE GRADUATES
•
THEIR CHALLENGE

DEGREE GRADUATES

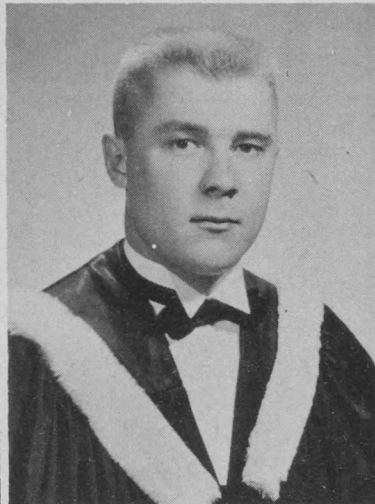
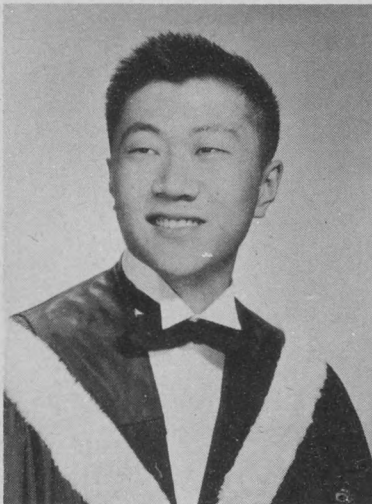


GARRY R. WORKMAN—Solsgirth, Man.

Garry is a "triple A" fellow; alert, ambitious and able. His ability was clearly demonstrated in the many organizations in which he took part — assistant editor and editor of the "New Managra", public speaking, debating, residence choir, M.F.A. youth, and to top it all in fourth year, Senior Stick of the faculty. He also participated in inter-faculty curling, badminton and rifle. His ambitions drove him to many academic successes and now drive him into Extension work.

JOHN BALOUN—Morden, Man.

From Caronport High (Sask.), John went on to different universities gathering credits. He stopped in Manitoba to pick up his B.S.A. Photography, hockey, cars and badminton took up his spare time. John's option is Animal Science and he intends doing post-graduate work.

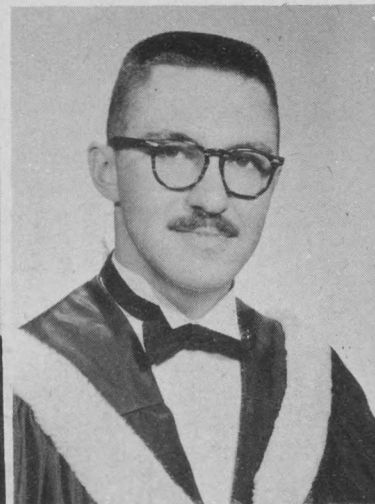
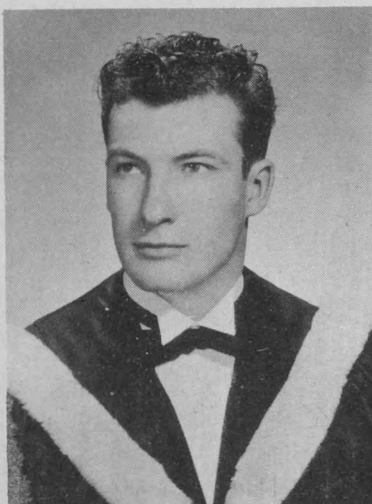


JOHN M. CHANG—Kowlool, Hong Kong

John came to Canada after graduating from the Diocesan Boy's School in far away Hong Kong. He has taken the Dairy Science Option and his plans slate him as a Dairy Laboratory Scientist.

ROGER K. EYVINDSON—Carberry, Man.

Roger is noticeable in that he goes unnoticed. Quiet waters run deep though, and Roger has been class president (2), on the Fair Board (2, 3) and an active partaker in inter-faculty sport. No doubt, Roger has done a great deal of pondering already, and intends to do more of just that in the Economics field with immediate plans of post-graduate work.



RAE J. HAMILTON—Glenboro, Man.

"Hump", as Rae is sometimes called, received his Junior Matriculation from Glenboro High. He attended United College, took Science II at U. of M. and then entered the faculty of Agriculture in the Economics option. Rae was an active participant in faculty sports. His lively, jovial nature made him a favorite amongst many. He is seemingly "un-concerned" about the future.

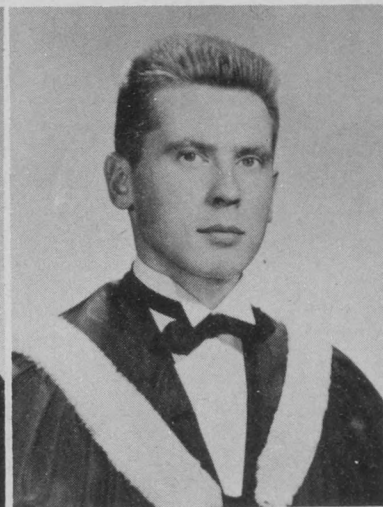
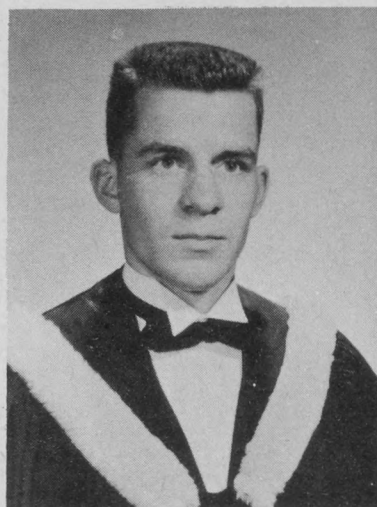
ROBERT L. HAMM—Altona, Man.

Robert is a graduate of Gretna Mennonite Collegiate. He contributed to inter-faculty sport with his hockey know-how, as well as his bowling. A major in Economics, Bob's future plans are extension work.

DEGREE GRADUATES

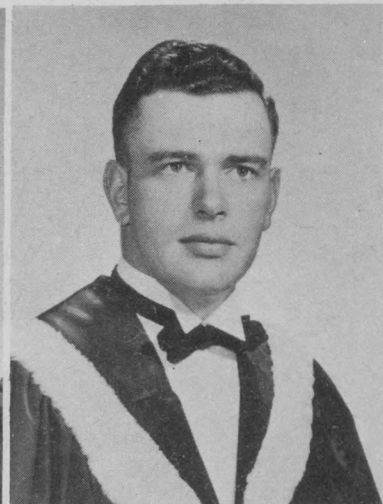
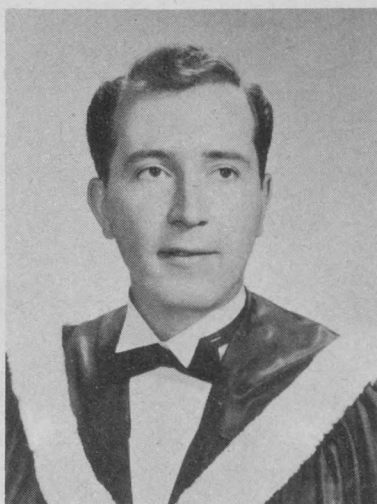
DAVID A. HAY—Foxwarren, Man.

"Dave" is our quiet-natured Aggie though he has been very active on the Fair Board (2, 3, 4) and on the Student Council (4) as well as a participant in hockey, football, and soccer. His option is Animal Science and he plans on going into Extension work.



JERRY G. ILCHYNA—Anola, Man.

Jerry is known for his good looks, witty personality, ability at playing cards, and good taste in women. In athletics he excels at handball, badminton and volleyball. He was also class literary and debating rep. in third year. In the Entomology option, Jerry's plans include post-graduate work.

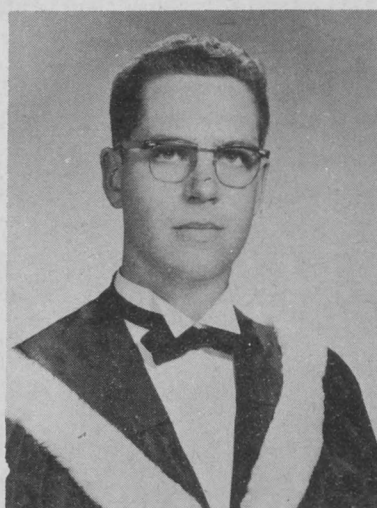


LOUIS M. LENZ—Brandon, Man.

Louis somehow got associated with lenses, and made photography his hobby, hobby that turned him into class photographer. His other activities included member of the Fair Board (2, 3, 4), freshie convenor (3), Student Council (3) and assistant editor of the Managra. Louis brought forth from the Wheat City College a B.Sc. and intends to do post-graduate work, preferably in his option, Entomology.

CARLYLE H. McDougall—McConnell, Man.

This Animal Science man has found time for many extra-curricular activities including class president (3), vice-stick (4), Fair Board (3) and sports, curling, rifle and handball. Carlyle's future plans are directed toward teaching.



JOHN L. NEABEL—Forest, Man.

John is one step ahead of most of his classmates; he's married. He always was an active man, as his status shows it, but also in faculty affairs; Assistant Fair Manager (3), Fair Manager (4), debating (1, 2, 3, 4). After graduation John will work for the Dept. of Agriculture in Extension work.

RODNEY SIEMENS—Horndean, Man.

"Rod" is our man with great ideas. He came to Agriculture from Science II and resolved to go through his course in three years. He has majored in Economics. He is active in I.V.C.F. Future plan besides marriage is Extension work.

DEGREE GRADUATES



ABRAHAM TEICH—Winnipeg, Man.

Agriculture is proud to hold another man with an "all-round education." Abraham holds a B.A. degree and now receives a B.S.A. coronated with a plant science major.

BRUCE TODD—Winnipeg, Man.

A junior matric from United college brings us Bruce who now holds a major in Entomology. Bruce has been very active in church work and plans to study Theology after graduation.

An Advancing Agriculture

With each passing year farming is becoming more efficient and vastly more technical. The successful modern farmer must not only be able to interpret and apply the results of science and research, but have the ability to organize and operate his farm on sound business principles. Yes, great challenges and rewards lie ahead for the University trained agriculturist. The agricultural industry of Western Canada needs you.

On behalf of the Grain Companies listed below we extend to the 1960 Graduates in Agriculture our warmest congratulations. May success follow all your future agricultural endeavours.

LINE ELEVATORS FARM SERVICE

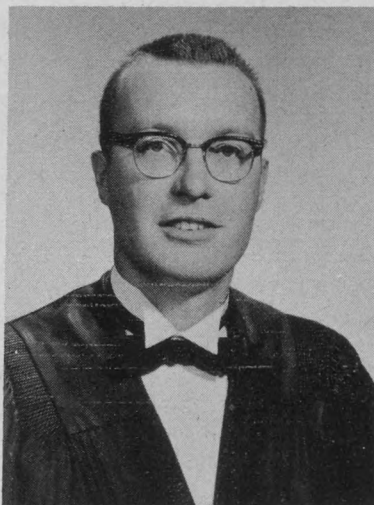
WINNIPEG, MANITOBA

Member Grain Companies: **FEDERAL • PIONEER • ALBERTA PACIFIC • PATERSON**
• McCABE • PARRISH & HEIMBECKER • INTER-OCEAN
ELLISON MILLING • QUAKER OATS.

DIPLOMA GRADUATES

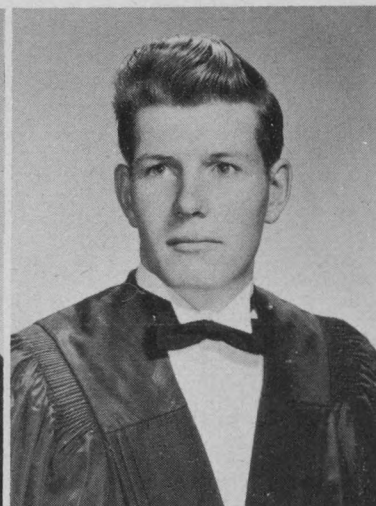
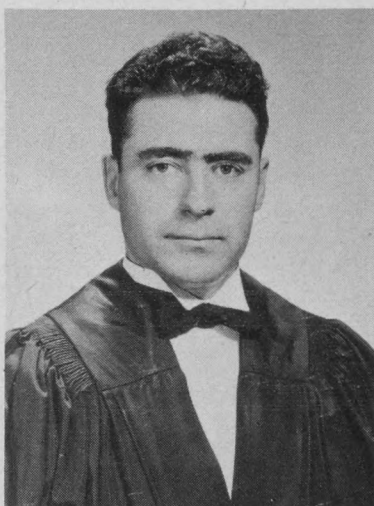
EDWARD AIME—Clandeboye, Man.

A graduate of Selkirk Collegiate. Ted's main interest is dairy cattle (Jersey). His other activities include Fair Board and Residence House Committee. After graduation he intends to go into partnership with his brothers on their dairy farm.



GORDON BRADLEY—Portage la Prairie, Man.

Hot rods and sports cars take up most of this quiet (?) fellow's spare time. Gordon's future plans are farming with his brothers on the Portage plains with specialization in registered seed.

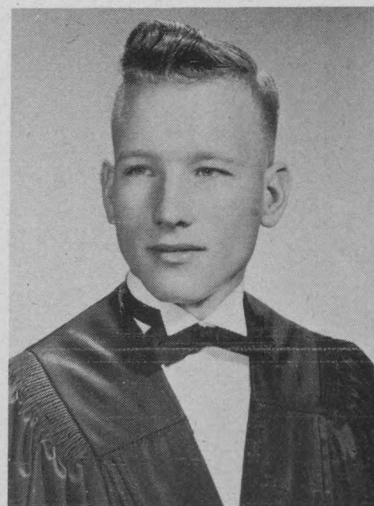


LAURY BRISSON—Cardinal, Man.

Our diploma Frenchman and a typical one at that . . . Laury has shown much initiative in his two years at U. Active in sports, active in his faculty as liaison officer, holder of scholarships, Laury plans to return to the farm.

GEORGE CHAPMAN—Virden, Man.

The tallest of the Diploma '60 class, George came to University from Manitoba's oil capital. Even though he is the studious type, George manages to find time for the fairer sex. After graduation he plans to go back to the farm.



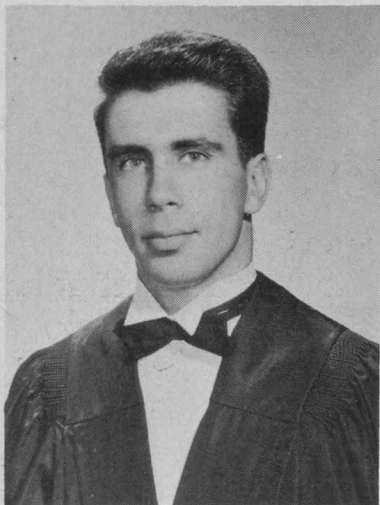
HAROLD CHIPONSKI—Portage la Prairie.

"Chip", one of the sociables of the class, has helped make residence life more interesting and enjoyable. His favorite pastimes are curling and dancing. Farming and marriage are Harold's plans for the future.

FRANK FROEBE—Homewood, Man.

A graduate of State Military College at Alton, Illinois. Frank's favorite sport is soccer but he would rather be at the "controls" of a single engine aircraft. There has been speculation that Frank will be the first one to break the bachelor tradition of the class. Future: flying farmer of Homewood.

DIPLOMA GRADUATES



THOMAS HAWKINS—Balmoral, Man.

"Tom" has made himself known throughout the faculty not by his size but simply by his enthusiasm. He's been on the Fair Board, on student council, he has been successful in curling and rifle. Oh yes . . . he plans to get married.

GORDON MCPHEE—Dauphin, Man.

President of second year Diploma, Gordon is well liked by his classmates. He is quiet but always there to give a helping hand. The University Brass Band has had him as member. Gordon also enjoys public speaking and debating. Dauphin awaits him.

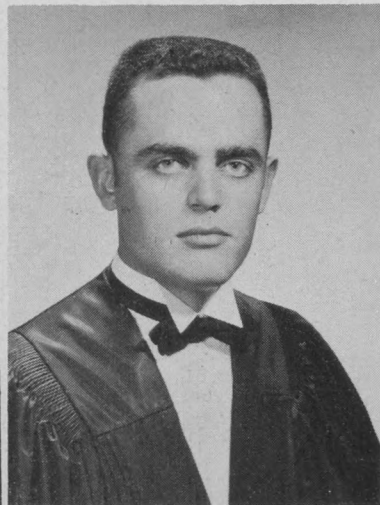


JAMES MORRISON—Hartney, Man.

Although he appears to be shy and quiet, Jim's achievements show that he is anything but that. His activities include rifle, curling, Fair Board (sheep convenor), and fishing in the summer. As a future farmer at Hartney, Jim will certainly be an asset to the community.

LORNE PAUL—Balmoral, Man.

"Dad" is one of the fellows who has come back to take the Diploma course after being out in the "cruel world". Student Council, Fair Board, curling, and shooting are among his many activities. After graduation, Lorne intends to go back to the farm and raise swine.



LAURENCE ROELAND—St. Boniface, Man.

A graduate of Provencher Collegiate in St. Boniface, Laurence's interests lie in curling, shooting and debating. Laurence has led the other fellows to believe that he is a charmer of the opposite sex; is there some doubt as to the validity of this? Dairy farming is this ambitious young man's plan for the future.

JAKE SAWATZKY—Gnadenenthal, Man.

This quiet fellow with a weakness for nurses and cars is one of the more conscientious students in the class. As far as sports are concerned, Jake excels at hockey and volleyball. After Jake graduates, the residence will lose one of the most formidable water fighters in its history. Farming and marriage (?) will take up most of Jake's time after he graduates.

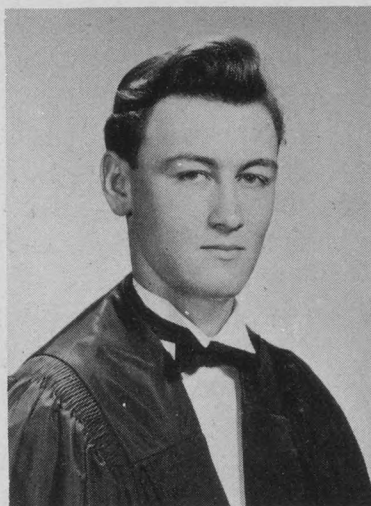
DIPLOMA GRADUATES

NELSON SKOMOROWSKI—Grandview, Man.

Nelson is equal to "pep" in Agriculture. He is an aggressive debater. Activities include literary and debating rep. for his class, rifle, Fair Board, volleyball. Nelson is also holder of scholarships. Farm manager is Nelson's ideal.

HAROLD DALE SMITH—Snowflake, Man.

"Smitty", from that "real cool" border town called Snowflake, has shown a genuine interest in many different activities. Sports-wise, he is an ardent curler and a keen baseball player. One of his favorite hang-outs is the Pembina (Curling Club). Dale can always be relied upon when there is something to be done. Beef cattle and performance testing will occupy Dale's time after graduation.

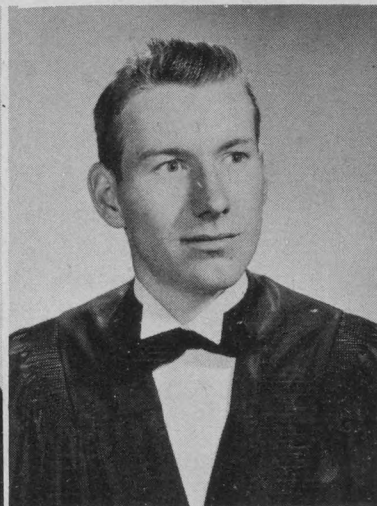
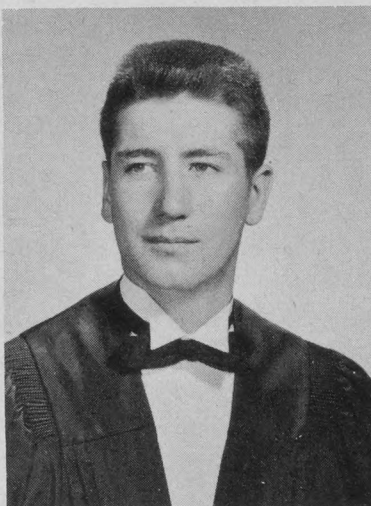


JERRY VAN DEYNZE—Somerset, Man.

Jerry is a likeable fellow. He has proved to be a good student and an active Aggie. Hockey is his favorite sport though he enjoys rifle and badminton. Somerset hills await Jerry as a distinguished farmer.

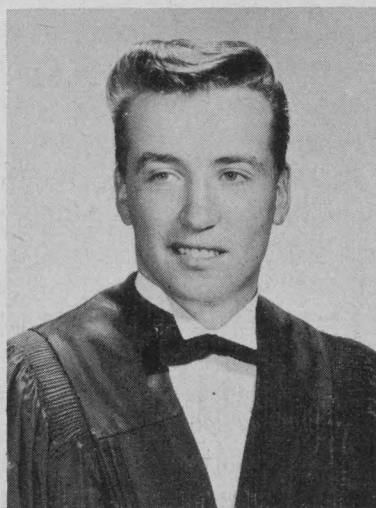
BURTON WATERS—Charleswood, Man.

"Burt" is one of the few fellows in Diploma who does not live in residence. His main extra-curricular activity is the R.C.A.F. (auxiliary) of which he has been a member for three years. Burt has not made any definite plans about his future after graduation.



JACK WILSON—Rathwell, Man.

A competitor for the Saskatchewan winter fair trip last year, Jack is active in 4-H work and the Aggie-Winter Fair. He also enjoys hockey. The girls like him and he likes the farm.



TRAINING THE FARMER OF TOMORROW

By E. H. LANGE

Director, Diploma Course in Agriculture, University of Manitoba

Farming has always been a challenging occupation, requiring a wealth of experience and demanding wholehearted effort and dogged loyalty or perseverance. In addition, farming today requires more basic education and a greater knowledge of the application of science to agriculture. Many new problems have arisen and have posed new challenges: challenges in production, management, marketing and, latest but not least, the challenge of agricultural competition as a weapon in the "cold war".

To meet these challenges and the many drastic and fundamental changes in farming, in the rural community, and in the agricultural industry as a whole, the Faculty of Agriculture in Manitoba was compelled to re-examine and re-assess its vocational course in Agriculture.

Three years ago the Dean of the Faculty appointed a committee to design a course which could meet the future needs of the Manitoba farmer — his needs as a member of his community, his needs as an important citizen of Canada, and particularly his needs as a vital link in the large and complex chain of the "food business" of our nation. After much searching and deliberation, and after having consulted former students, progressive farmers, farm organizations and representatives from agricultural industry, the Committee reported. On the basis of this report the Faculty of Agriculture set out in the fall of 1958 to implement a new "Diploma Course in Agriculture."

Objectives of the Course

Realizing that the bulk of the practical know-how for farming must always be obtained on the farm through actual farming experience, the Committee agreed that the immediate objectives of the Diploma Course should be:

1. To train mature, young men, possessing ability and a genuine interest in farming, in the skills necessary for successful **farm management** and for **community leadership**.

2. To give these men as **broad and basic a training as possible**, thus preparing them to meet the changes and challenges of the future more effectively.

It is hoped that in this way the broader objective of the Course may be reached; namely, that the agricultural community and industry may be assisted and strengthened for the benefit of the nation as a whole.

Admission by Selection

About 1,300 new farmers are needed for Manitoba farms each year. Obviously, the University can hope to provide training for only a small portion of them. To be most effective in its effort, the University must, therefore, seek out the best of these young men and interest them in the vocational course in Agriculture, in the hope that those selected will become useful and responsible innovators and leaders in their communities. Since age is not always a true indication of maturity, and since the scholastic record does not necessarily measure mental ability, everyone interested in the Course is encouraged to apply, regardless of his age or schooling. Applicants are then screened by a Selection Committee appointed by the Dean of Agriculture and composed of a farmer, a man from agricultural industry, a man from the Extension Service and two representatives from the Faculty of Agriculture. This Committee gathers information about each candidate and interviews him personally. Candidates not accepted often benefit from the friendly advice of the Committee, and may be encouraged to re-apply later.

Production Information

Information on production is important

and will not be curtailed in the new course, but the emphasis will be shifted from the "how" to the "why" — not emphasizing the cutting of a rafter, but rather the design of a functional building as part of a useful farmstead plan; away from memorizing the exact amount of 2, 4-D per acre needed to control a certain weed, and toward an over-all weed control program for the farm.

It is thought that certain manual skills needed on the farm, and some of the **changing** recommendations on production, may best be taught in Short Courses or obtained through reading, which require less time and money. Graduates of the Diploma Course, some years after graduation, may wish to obtain additional **specialized** knowledge from Short Courses catering to their individual interests and needs. However, the use and care of hand and power tools, as well as arc and acetylene welding have been retained in the Course.

Courses

The latest information on plant and animal production is given in courses on field crops, special crops, horticulture and in courses on feeding, breeding and management of livestock and poultry. A considerable amount of time is spent on farm power and machinery. The design, construction, heating, lighting, insulation and ventilation of farm buildings are studied. A course in "Farmstead Planning" emphasizes work simplification and the arrangement of buildings and shelterbelts. Insects of importance on the farm are also studied and instruction in beekeeping is given.

Of special interest to the home farm are the courses in Soils. A course dealing with the origin and properties of soils is followed by a course in Land Use and Soil Management. The first year students obtain aerial photographs of their home farms. During the summer, between the first and second year, a soil specialist from the University or the Manitoba Department of Agriculture visits each student's farm, and jointly with the farmer and his son makes a Land Use mapping. This information is used in the final year of the course to make a soil and farm business plan for each farm.

Farm Management

Much greater emphasis is given to farm business management. It is in this area that thorough training often pays biggest dividends. Case studies of typical farm businesses are made, and these farms are visited. A large part of the farm management course consists of laboratory periods. Here the business records of these farms are closely examined, analyzed and used to demonstrate how sound farm business decisions can be made. Complete budgets for the farms are prepared.

Marketing

Much additional time is also spent in the study of marketing. Lectures during the first year are supplemented in the second year by an extensive first-hand study of the grain and meat industries. After a thorough briefing, and armed with a set of questions, students spend two days a week, for twelve weeks, at chain-stores, stockyards, packing plants, the Board of Grain Commissioners, the Wheat Board, the Grain Exchange, elevator companies, terminals, flour mills, bakeries, feed mills, etc. On their return to the campus, time is allowed for a thorough discussion of their observations. A weekly written report tests the student's knowledge and helps him to draw his own conclusions. Students gain much from a close study of agricultural business concerns.

Research

In order to give the students an appreciation of the importance of research to the farmer, and to acquaint the students with the scope of basic and applied research in progress in the Faculty, some time in the second year is devoted to a survey of agricultural research.

Planning the Farm Business

Toward the end of the Course, each student is asked to apply the knowledge gained in the Course to **his own farm**. The final assignment in the Course consists of an exhaustive study and analysis of his farm, including a carefully worked-out plan for its operation in the next three to five years. With the consent of the parents and in strict confidence, the detailed business records of each farm are analyzed by the student. Each student is asked to present his farm business plan, in advance, in writing to his instructor and to his classmates, and is then asked to

defend his conclusions orally before the class. In this way each student not only benefits from a close study of his own farm but also has a chance to examine critically the farm enterprises of his classmates. These carefully worked-out plans may be of interest to the fathers as well as to the sons.

Field Studies

During the summer months, after seeding and before harvesting, students who have successfully completed the first year of the course, are required to take part in a carefully planned ten day field trip to study Manitoba agriculture first hand. Carefully prepared guide books are given to each of the students and analytical oral and written reports are required of them. These reports are evaluated for credit. Students gain a broader knowledge of agriculture in their own province and are challenged by a study of the leading farm enterprises in Manitoba.

The first tour was made in June 1959 when the group visited 36 agricultural enterprises and covered over 1,000 miles. Teachers and students benefited most from the informal but intensive question and answer period with each farmer who, on this occasion, was both teacher and host. Text book knowledge becomes real and relevant in discussion with farm leaders on their own farms.

Training on the Farm

Students, at their own request, may be placed for a time on selected farms to work with and learn from other good farmers. This apprenticeship training may be expanded in years to come and may eventually have to be made a compulsory feature of the course.

Citizenship and Leadership

The Faculty of Agriculture attaches much importance to the need for effective citizenship and leadership training. Leadership and extension skills are taught in classes, and leadership opportunities are provided in student organizations. Courses in Communication teach students to read, write and speak more effectively. A course in Citizenship acquaints them with the several levels of government in Canada and stresses the responsibilities of a citizen in a democracy.

Length of Course

To allow for the additional training required by future farmers, the new Diploma Course in Agriculture had to be lengthened. It runs from the beginning of October to the middle of April. Obviously, fall work will not always be completed on Manitoba farms by October, but it is not expected that this will be a real obstacle to enrollment. The number of applications received this year would tend to support this view.

Cost of Course

A longer, more intensive course costs more money. The tuition fee in the Diploma Course has been raised from \$35.00 to \$125.00 and may be raised even more. A reasonably correct price tag on the course is more indicative of its value. Good and needy students may then be subsidized through a bursary scheme to help defray their expenses.

Bursaries

In addition to the bursaries and scholarships, which have been so generously given by a number of business concerns and organizations, the Manitoba Department of Agriculture recently extended their loan-bursary program to the students in the Diploma Course in Agriculture. A deserving student may obtain generous assistance under this scheme. If the graduate returns to work on a Manitoba farm, this money is written off at the rate of one-third per year. If, however, the graduate permanently severs his connection with the farm, or if he fails to complete the course, this money becomes a debt and must be repaid to the Government.

It is fair to say that lack of finances should not bar a person interested in the course from applying for admission.

In Conclusion

The Diploma Course is developing a new approach to the training for vocational agriculture and citizenship. The course will need to be adjusted continually to meet the swift changes in our society and, it is hoped, will provide an answer to the challenges in agriculture.

A CAREER IN AGRICULTURAL EXTENSION

A CHALLENGE TO THE 1960 GRADUATES

By D. C. FOSTER

Destiny is not necessarily predetermined, though it may be premeditated. Decisions affecting one's future career are usually resolved in quietude away from the classroom or off the football field. Perhaps in your case your moment of quietude came on the farm as you planned a career in Extension while seated high on the combine awaiting a tardy grain truck. It's surprising how slowly grain trucks travel when one is anxious to finish the last eighty acres of wheat, but in that time a fellow's thoughts can swiftly traverse the miles to the University and back again to his exposed foam rubber pedestal. It's at rare moments such as this that a career is born.

On the other hand, you may have resolved to be an agricultural representative, when, as a teen age 4-H club member, you received a seventh prize ribbon for your beef calf. There were only eight animals in the class but the judge, a livestock specialist, had words of praise and encouragement. "Select a thicker calf next year," he suggested, "and start him on feed a week earlier." Such unexpected encouragement strengthened your resolve and desire to succeed.

Some young people choose Extension work because the salary is favorable or because a car is provided.

A decision on your life's work should not be based on the size of the monthly cheque or the make of car provided, but rather based on a sincere self-analysis of your potential and your desires in life. What can I offer the extension field? How dedicated will I be? Do I like people? If so, do I enjoy being with young people only, or do I prefer adults? Do I favor an English speaking community or am I equally as tolerant of

other national or ethnic groups? If you are dedicated, ambitious, a builder, a co-operator, a believer in humanity; and if you are not too concerned whether your residence is fifty miles or three hundred miles from Winnipeg; than you have met the first qualification of agricultural extension. If you have a passion to solve problems, to make decisions, to overcome complacency, to remedy frustration and discouragement, then you have met qualification number two. Finally, the third qualification will be met if you enjoy seeing intelligent young people grow up into healthy, highly respected and well educated men and women, because of your efforts and guidance.

Service in the Manitoba Department of Agriculture and Conservation can be a rewarding and fruitful life. The work at times is hard, but if you are an honest person you could never enjoy cashing monthly cheques when your efforts and productivity has not been commensurate. Extension employment can be fun — it is never dull nor tedious.

Opportunities for employment and advancement with the Department compare favorably with any other province in Canada. The present staff is composed of comparatively young men and women, many of whom are ambitious, all of whom desire to advance, and none of whom would be unwilling to lend a guiding hand. They enjoy freedom in their work, advancing new ideas and initiating effective programs.

The Extension Service is divided as follows:

(1) The agricultural representatives and the home economists who form the right arm of the Branch. These busy individuals live and serve in rural Manitoba. Each is provided with a central office in the approx-

imate geographical centre of the area served, stenographical staff to assist in the routine correspondence and general office management, a car and an expense account.

The agricultural representative administers and supervises agricultural projects or policies in his area. He relays the latest research findings from The University of Manitoba and other agricultural research centres to the farmers under his jurisdiction, and likewise conveys the farmers' problems to the head office and to The University. He will introduce new rust tested cereals into the community, encourage the grassing of more land, stimulate tree planting and better insect control, and obtain the latest facts about livestock, poultry, fruits, vegetables and farm accounting. As well, he supervises the 4-H clubs.

Likewise the home economist carries out similar duties in her field. She works with the Women's Institutes, ladies, directors of agricultural societies, Farm and Home groups and the 4-H girls' clubs.

The agricultural representative and the home economist work together as a team on many projects.

(2) The extension specialist who forms the other arm of agricultural extension. Their main duty is to provide resource material for the agricultural representatives and the home economists.

Extension work is an out-of-school system of education by which adults and young people learn by doing. It is a partnership between the **Government**, **The University**, farm organizations and farmers generally, which provides service and education designed to meet the needs of all people, rather than a selected few.

The fundamental objective of extension is the development of people.

Extension work was aptly described by the late Dr. Seaman A. Knapp, a former Dean and President of Iowa State College, and founder of the demonstration method in extension. He says the purpose of extension is 'to readjust agriculture and place it upon a basis of greatest profit, to reconstruct the rural home, and to give country life an attraction, a dignity and potential influence it has never received.'

As Dr. William F. Wickenden once stated in quoting from the New Testament: "If

any man compel thee to go one mile, go with him twain." Dr. Wickenden suggests that the second mile is the more important.

"For most of us, life begins on a mile of compulsion, a round of tasks and duties which must be traversed daily if one is to survive, but beyond that lies the mile of voluntary endeavor where most strive for understanding rather than power, for excellence rather than quantity, for self expression rather than gain. Here men literally work for fun, and I have a firm conviction that men ought to complete their careers in the second mile, rather than the first."

If you have a strong desire and an ambition to render distinguished service to Agriculture, now or in the future, then you should join the aggressive team in Manitoba's Extension Service.

An ideal extension program might include:

- 1) A flexible approach.
- 2) Satisfying the needs of all members of the family.
- 3) Providing an adequate standard of living for the farm family.
- 4) Dissemination of practical information.
- 5) Fostering community organization, growth and development.
- 6) Encouraging normal and foresighted expansion and development of the farm.
- 7) Advising young people of the educational opportunities available through high school and university.
- 8) Encouraging cultural development in ALL individuals.

Most career extension personnel, after long and devoted service, would repeat their years in the field if given an opportunity.

The extension man or woman requires a broad training in science and the humanities. In-service training, provided by the Manitoba Department of Agriculture and Conservation, keeps the staff up-to-date. Regional and annual conferences for provision of the most recent research findings and provision of new extension principles are designed to keep the extension personnel above the demands of the people in the area. Recently, a policy was introduced to permit personnel to further their studies toward a

continued on page 33

WHAT INDUSTRY EXPECTS OF AGRICULTURAL GRADUATES

By F. W. HAMILTON
Director, Public Relations
Manitoba Pool Elevators

There has never been a time in the history of agriculture or of agricultural industry when education was of such importance. The primary purpose of an education is to teach a person to think. Whether the graduate intends to farm, to teach, carry on research, or pursue a business career in industry, a general education is of first importance.

A general education means more than a working knowledge of reading, writing and arithmetic. It means an understanding of the humanities, mathematics and laboratory sciences. The Greeks termed this a liberal education and described it as having knowledge of grammar, rhetoric, logic, arithmetic, geometry, music and astronomy. Thus equipped, the student could think imaginatively, reason logically, define clearly, choose well, speak with precision, listen with comprehension and write with effectiveness.

A versatile and well trained mind is the finest asset an individual can bring to an industrial company. It is becoming more important among the rank and file of industrial workers and a necessity for the executive.

Dr. Clarence B. Randall, Chairman of the Board of Inland Steel Co., said to graduating students at the Massachusetts Institute of Technology: "I employ men for their proven capacity to learn. And in the steel industry I care not whether the man masters metallurgy or the Greek classics as long as he has that final intellectual capacity. I want the precision found in the metallurgist but I want also the power to appreciate the logic and clarity of expression of the Greek philosophers, for both those qualities are required in business."

General education adds breadth and depth to technical skill and competence, it gives meaning to the confined laboratory of the technician.

Industry requires three main types of personnel — the research worker, the technician and the executive. In each of these a general education is required, for whatever the job, communication of ideas, either written or spoken, is necessary.

(1) The Research Worker

The research worker is a dedicated person. Primarily he is an explorer who wishes to find what lies beyond. His unanswered question is Why? Often he is more concerned with the challenge of a particular research than with monetary rewards. A good research student is a priceless acquisition for any industry. This is especially true of companies planning growth. Change is the order of the day and the tempo of change is accelerating. Only the company keeping abreast of change or helping to create it with well planned research will remain in business in the last half of the twentieth century. Industry will long have an open door for the dedicated research scientist, and it will expect much of him in the future.

The person planning to spend a lifetime in research in industry might well ponder the necessity of a general education. He might ask himself — why not concentrate all thought and energy solving a particular scientific problem without regard to the outside world?

The answer of course is people! In industry the needs, the desires or whims of people create the demand. Most industries exist to satisfy these demands.

A recent example of technical research failing to understand the desires of people is the unheralded demand for small foreign cars. Automotive research engineers concentrated on creating larger, more powerful, chrome heavy monstrosities, not realizing that the desires of people were changing.

Prestige no longer being measured in terms of car length, the demand had succumbed to peoples' desires for the multi speaker Hi-Fi, summer cottages, boats, travel and many other products enjoyed in our present high standard of living. Somewhere along the line research had overlooked the changing conditions.

In industry it is increasingly important for the research worker to acquire a general education as well as to master his particular field. He is thus better equipped to see events of today in terms of tomorrow's demands, to judge trends and fit his research programme into the changing patterns of our time.

(2) The Technician

The technician is the skilled artisan; the men or women who make the machines hum or repair them when necessary. The greatest percentage of all workers come under this category. They have mastered the secrets of doing one job well, they are specialists and they are important people in the great cog wheels of industry. Without them factories and enterprise would cease operation.

Possibly the agricultural graduate will find fewer openings for his professional aptitudes in this large area of employment, for the demands of industry are not usually the skills of the graduate in technical agriculture.

There are of course the exceptions that prove the rule and technicians will be needed in such areas of employment as servicing the "off farm" demands of agriculture. This is becoming more pronounced as contract farming increases in importance. The advice of the skilled technician in such things as animal and poultry feeding, chemical and fertilizer requirements, or farm management suggestions, will be greater in the years to come.

Where there is demand for technicians, industry will need the services of those ready

and willing to keep up with the ever increasing tempo of advancements in their respective fields. In the age of automation nothing is static.

A monthly letter of the Royal Bank of Canada states — "Without preparation other than specialty where does a man stand? If there is anything certain under automation it is that the job, even the bottom job, will change radically and often. Once a man has demonstrated his mastery of one job he must be ready to tackle something for which he was not trained. He needs fertility of thought and the ability to adapt himself to a world of fluid possibilities. How is one to avoid technical hypnosis or personal stagnation? Only by getting out of the narrow world of the specialist through general education."

Many people have spent years training for a particular trade or job only to find it outmoded and the demand for his skills disappearing. Herein lies the need for an education that makes allowance for adaptability as we turn towards the last quarter of the twentieth century.

(3) The Executive

Industry now as never before requires executives who can think, who have knowledge and background allowing them to understand the broad implications of many problems, who can sort them out methodically and arrive at the correct decision. This has not always been the case. Only a few decades ago most industries were small business concerns. Mass production, amalgamation and automation have paved the way for the present day large corporation.

The company payroll of a few employees has changed to the big business of a few thousand employees. Where his predecessor dealt with the internal problems of a few employees most of whom he knew by their first names, the executive of today may deal with thousands.

The business executive of 1960 needs to know as much of public opinion as he does of the smallest detail of business for sooner or later one of these problems will find its way to his desk. Where his predecessor dealt with the public relations problems of a few hundred customers many of whom he knew

continued on page 35

RESEARCH AT THE CANADA DEPARTMENT OF AGRICULTURE RESEARCH STATION



Suppose you take a walk.

Stroll east past the Residence, past the Dean's house and the Arts Building, and past the tennis court. There, on your right, you will find a small red brick building. It is perhaps the only building on the campus of the University of Manitoba which is internationally famous. Beside the door, there used to be a brass plate reading "Dominion Rust Research Laboratory". That sign is now fastened to the wall inside the front door. To replace it on the outside, are large letters identifying the "Canada Department of Agriculture Research Station Annex". Across the road is a large new yellow brick building, sporting the sign "Canada Department of Agriculture Research Station". Look at both buildings well; they provide an example of the tail that wagged a dog.

Back in 1925, a whole professional lifetime ago, the first dedicated members of a research group were brought together to work in that small building, which was ready for them in the spring of 1926. They were assigned to investigate the rust problem. They were to try to find control measures for cereal rusts and other diseases; to produce varieties of wheat (and later, of oats and other crops) resistant to rusts, smuts, and all the other plagues that attack them, and giving high yields of good quality grain;

By W. E. SACKSTON
Head, Plant Pathology Laboratory



and, incidentally, to have the time of their lives, working very hard at what they all liked better than anything else, scientific research.

The work of that original group, and of those who have swelled the ranks since 1925, has been remarkably successful. Think of the practical results. There has been a series of rust resistant wheat varieties, starting in 1937 with Renown, then Coronation, Regent, Redman, Selkirk and now Canthatch and Pembina. Selkirk is the contender which took on, and defeated, stem rust race 15B in the Canadian Prairies, and the spring wheat regions of the United States. There has been a continuing series of disease resistant oat varieties; following the first one, Vanguard, in 1937, came Ajax, Exeter, Garry, New Garry, Rodney, and Vicar. Not only are these varieties grown throughout Western Canada; they are also grown widely in the United States and used in breeding programs in many parts of the world.

Impressive as the new varieties are, there are also other practical achievements of the Winnipeg research group. Less spectacular, but important, are the contributions made to control of diseases by seed treatments and field applications of fungicides.

The entomologists, who worked at Brandon and in downtown Winnipeg before the large new Research Station building was finished in 1957, have their own practical achievements. Their work has forecast grasshopper and other insect infestations, and made it possible to control insect pests in the field and in stored products such as grain and flour.

The economic value of all these contributions can be estimated by anyone with a flair for calculations; it may be enough to point out that the savings to Prairie grain growers in one year, because they have disease resistant varieties, is enough to put up and equip more than a hundred buildings like the new Research Laboratory; or to pay all salaries and other research expenses at the Research Station for more than a century at the present rate!

If research were to be measured by practical results alone, this account could stop here. Actually, it is just getting started!

Most of us realize today that Faraday's experiments were essential to our electric light and power supply; that Einstein's equations in theoretical physics, worked out half a century ago, were basic to today's nuclear bombs — and atomic power stations. What some practical men forget is that there has to be a constant flow of ideas, of "basic" or "fundamental" research results, or else the pool of information which feeds technology, or practical applications of science, will dry up. What some intellectual snobs forget is that the difference between "pure" and "applied" research is often merely the objective. Two simple examples from this laboratory should prove the point. If a wheat breeder crosses two plants in order to develop a high yielding, high quality, disease-resistant variety, he is doing applied research. If he crosses the same two plants in order to determine the nature of inheritance of some interesting character, his research becomes *simon-pure* genetics! If a plant pathologist investigates the effect of heavy metal ions on the metabolism of detached, rust-infected wheat leaves, he is doing pure research in plant physiology; if he finds that certain ions inhibit rust development without hurting the wheat leaf, and tests the appropriate

chemicals to see if they will control rust, his research is as "applied" as it can get!

The relationship between "pure" and "applied" research is important for another reason. Practical applications are often a by-product of fundamental research, as we all realize. What some people do not realize, is that an investigator, motivated by very practical considerations, may almost incidentally make important basic discoveries. Dr. Craigie's discovery, at Winnipeg, of sexuality in the rust fungi answered a basic question in biology which had frustrated many men for three quarters of a century. That was in 1927. That discovery was immediately exploited by others at Winnipeg, who made their own additions to basic knowledge on the genetics of parasitism in the rusts. Still others demonstrated the interesting, although somewhat bewildering, fact that certain fungi may have not only two, but many different "sexes". These, and many other fascinating "basic" discoveries, were made by people who were working on "applied" research, and making valuable practical contributions.

The fascinating thing about all this activity is that it is still going on. In fact, it seems to be gaining momentum. The "giants" of thirty-five years ago made their contribution, and what is more, they established a tradition of productive enthusiasm. Some of them were "kicked upstairs" to responsible research-administration posts in Ottawa — which, according to some research people outside that center could use a bit of leaven once in a while! Some have retired because the calendar and regulations made retirement mandatory, not because of loss in intellectual vigor or capacity. But the work has gone on! The tradition of enthusiasm, of discovery, has attracted young people who also have enthusiasm, talent, and training in new disciplines and new techniques. These new skills, applied to some of the old problems, have supplied answers unobtainable before. Even better, the new information has made it possible to pose new and more exciting questions, which will yield still more answers — and suddenly the young men will also have reached retirement age!

The fact that our staff members event-

ually retire is of interest not only to them, their families, and to the Research Station. It provides an opportunity for a new generation of students to see if they can fill the shoes their predecessors wore! The opportunities are actually few in number at any given time, but there will be one position to fill this spring, and others in the next year or two.

What do we expect of young people who want to join our ranks? First of all, they must be bright. In addition to being good students, they should have imagination, originality, and initiative. These must be supported by a solid foundation of scientific training. We are doing applied research on cereals and other field crops; but we are also doing a great deal of original and basic work in biology. Such work requires extensive and intensive training in biology — botany, zoology, physiology, genetics, and such specialized fields as mycology, plant pathology, entomology; chemistry, particularly biochemistry; physics; mathematics. No one person is expected to be expert in all these disciplines, but everyone should have a good general background, with particular proficiency in the fields basic to his own specialized training as a geneticist, cytologist, plant breeder; plant pathologist, plant physiologist, biochemist or entomologist.

The sort of "recruit" we want must also have energy. It is good to know a lot, but one must apply his knowledge to think about the problems being investigated — and must then put his ideas to work! He must have persistence. In biological research, failure is much more frequent than success. The man who can design experiments, or postulate hypotheses that will provide new information is a good research man. The man whose experiments and hypotheses actually yield answers to the questions he posed, is also lucky!

The desirable recruit must have enthusiasm. Even the most dogged persistence will not keep a man happy, working on a difficult research problem, unless he likes what he is doing. The best research men would sooner "do research" than any other work. It is this enthusiasm which makes them spend from three to five years in post-

graduate training, in order to take jobs paying less than many commercial positions.

The successful research worker must be able to communicate. If his work yields largely practical results, he will often have to talk about it, and certainly to prepare reports. His listeners and readers should understand him, and if possible, should be able to enjoy the process! If his work produces information rather than things, he must write reports and scientific papers — and address scientific gatherings. The audience for such information may be highly selected and highly trained — but even such an audience is entitled to clarity and at least a semblance of literary style.

Armed with all these qualifications, inspired with a desire to work on our problems, to be successful the applicant must then convince us, and the Civil Service Commission, that he is the best man available. Are there any candidates?

A CAREER IN AGRICULTURAL EXTENSION - -

continued from page 28.

Master's or Doctor's degree and remain on partial salary.

The extension emphasis is gradually changing in Manitoba from one of increasing material production to extending sociological concepts. In short, it is moving from grain yields to philosophy or psychology.

The Extension Service staff member is rated a leader of men. Have you leadership potential?

From the Red River to the Peace . . .
Progressive Farmers Buy Machinery
Co-operatively

THROUGH

**The Canadian Co-Operative
Implements Limited**

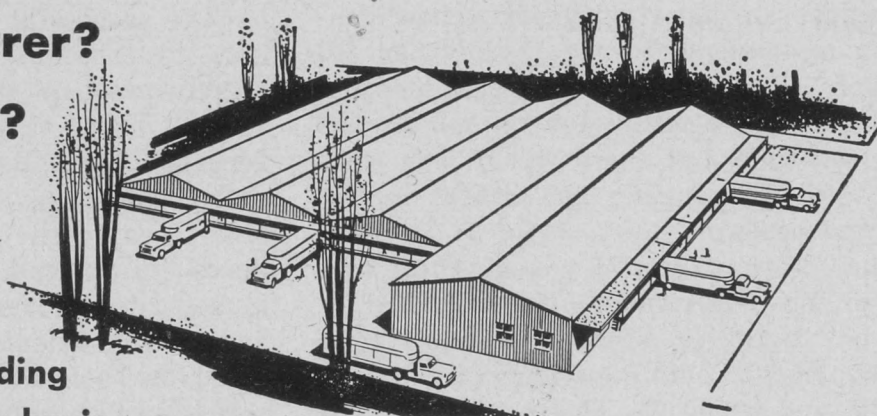
Winnipeg
Saskatoon — Calgary

Manufacturer?

Distributor?

Retailer?

**There's a
Stran-Steel building
tailored to your business**



Versatile Stran-Steel buildings can be job-engineered to fit individual requirements.

Long column-free spans allow the most efficient machinery arrangement. The warehouse operator will find clear interiors adaptable for storage of large or bulky materials and equipment. A full line of accessories is available. Whether Bow String or Rigid Frame, Stran-Steel buildings are easy to erect, durable and fire-safe.

Let us show you how they can best fit into your building or expansion plans.



Stran-Steel buildings are precision built by Stran-Steel Corporation, a unit of National Steel Corporation.

TRAINING OPPORTUNITIES

FULL-TIME DAY COURSES

In the following Trades and Industries:

BAKING
DIESEL
WELDING
WOODWORK
ELECTRICAL
BARBERING
MANICURING
HAIRDRESSING

COMMERCIAL
AUTOMOTIVE
WATCH REPAIR
UPHOLSTERING
MACHINE SHOP
MEAT CUTTING
REFRIGERATION

RADIO OPERATORS
RADIO SERVICING
PRACTICAL NURSING
COMMERCIAL COOKING
BODY & FENDER REPAIR
MECHANICAL DRAFTING
ARCHITECTURAL DRAFTING
TELEVISION & ELECTRONICS

This is an excellent opportunity for ambitious young people over 16 years of age to prepare for employment.

MANITOBA TECHNICAL INSTITUTE

1181 Portage Ave.

WINNIPEG 10, MANITOBA

Phone SUNset 3-7127

Pioneer-Cafeteria-profit proven Feeds

A NEW ERA OF FEED MANUFACTURING

Compliment the Faculty of Agriculture on 53 years of Scientific Progress

For Results That Pay — Feed Pioneer Cafeteria Today!

WHAT INDUSTRY EXPECTS FROM AGRICULTURAL GRADUATES - -

continued from page 30

personally, his successor must now have an understanding of the complex public relations field of many thousand customers or potential customers, whom he never meets.

The executive of today must have an understanding of the social security needs and desires of hundreds of employees and the multitude of problems entailed in pleasing countless thousands of customers. He must understand the industrial principles of turning out the best product on the market and the complex areas of commerce that get the product to the consumer who is being persuaded to become a customer.

Men called to leadership in business and finance must have far more than technical training. In choosing between a technical man without executive ability and an executive without technical ability, industry invariably chooses the latter. Recent industrial surveys point out that managerial ability commands substantially higher salary ranges than those having technical knowledge only. The ability to think clearly and solve problems wisely commands the larger pay cheque.

The executive who accepts the responsibility of management must also be prepared to accept the greater responsibilities that accompany that office. The demands by the larger community on the successful executive's time are many and heavy. His advice is sought on many matters, his patronage requested by countless community organizations, his life determined for him by the endless rounds of conferences and meetings. Truly it is no arena for the faint hearted. It is the market place for the disciplined thinker, the man who can weigh the many problems and arrive quickly at the solution, the man of decision and the man of action. All these and many more attributes, industry expects of the agricultural graduate who would be an executive.

Nearly 40% of the entire work force in Canada employment in the production, processing and distribution of agricultural products or in meeting farm requirements.

As agriculture and its related industries demand more business executives to meet these requirements, they should presumably turn to those with a background of agricultural training.

This is not the case. Few graduates in agriculture are meeting the demands of today's top executives in industry. To a much greater extent these positions are being filled by graduates in commerce, law or arts. What industry expects of the agricultural graduate with an eye on executive positions is the ability to think in three dimensions; to plan for the future, to act with precision, to get along with people, and above all to have the desire of accomplishment.

This is the challenge of industry today to all University graduates, and in particular to agricultural graduates who should be filling many more of the top executive positions.

The broad education now so necessary in these posts must start in the little rural schoolhouse, continue through high school and University, and on into the graduate's life span in the business world.

RECOGNIZING

The Higher Cost of University Education.
The Growing Demand for Trained Personnel.
The Expanding Need of the Agricultural Industry.

THE PIONEER GRAIN COMPANY LIMITED

WINNIPEG, MANITOBA

OFFERS

Two Bursaries of Three Hundred
Dollars Each

To Third Year Students of
The Degree Course in Agriculture

Enquiries for the 1960-61 Academic Year
should be addressed to

The Dean of the Faculty of Agriculture
and Home Economics

THE UNIVERSITY OF MANITOBA

CONGRATULATIONS AND BEST WISHES

COMPLIMENTS OF

COCKSHUTT FARM EQUIPMENT LIMITED

Canadian Manufacturers
of modern Farm Equipment
for Canadian Farmers
for
121 years

FEED-RITE MILLS LIMITED

Congratulates the 1960 Graduating Class

One of the greatest assets that we have is the friendship of those we serve. It is our responsibility to maintain that kindredship and the standard of product and service that our customers have grown to know and accept.

FEED-RITE MILLS LIMITED

250 Higgins Avenue - - Winnipeg 2, Manitoba

"YOU CAN TRUST ITS QUALITY"

IN WINNIPEG
IT'S

The McLaren Hotel

RUPERT & MAIN STS.

- REASONABLE RATES . . .
- COMFORTABLE ROOMS

In a Friendly Atmosphere

Winnipeg's Family and Residential
Hotel

(No Charge for Children under 14)

DAILY, WEEKLY and MONTHLY
RATES

Phone WH 3-8518 For Reservations

Serving the Farmers . . .

Macleod's mail-order catalogue service is geared to serve Manitoba farmers and — in addition — there are 39 Macleod's retail stores and authorized dealer stores in Manitoba, so it can rightly be said that Macleod's Limited give true consideration to the shopping convenience of Manitoba farmers.

Macleod's retail stores in Manitoba are located at: Brandon, Carman, Dauphin, Killarney, Neepawa, Portage la Prairie, Swan River, Virden, Winnipeg and authorized dealer stores at Altona, Ashern, Arborg, Beausejour, Birtle, Boissevain, Deloraine, Dominion City, Ethelbert, Fisher Branch, Gladstone, Glenboro, Lac du Bonnet, McCreary, Minnedosa, Morris, Melita, Pilot Mound, Roblin, Rosburn, Russell, Ste. Rose du Lac, Steinbach, Somerset, Souris, Teulon, Winkler.

Macleod's Limited has been saving money for farm customers for more than 40 years . . . during all these years supplying the best in farm supplies has been a full-time job with us.

MACLEOD'S

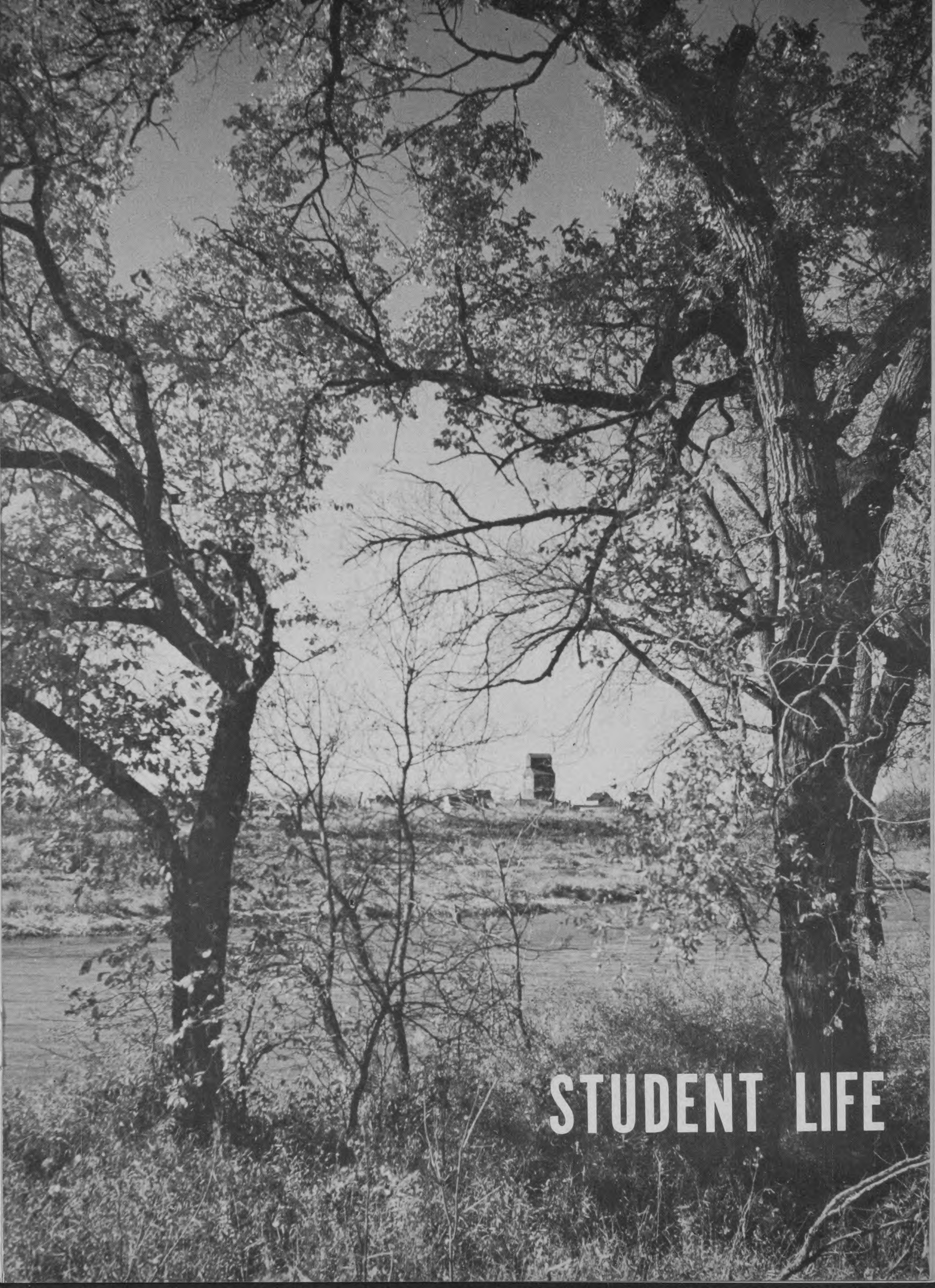
LIMITED

3 Stores in Greater Winnipeg:

118-120 Higgins Ave., phone WH 2-8568

1415 Main St. North, phone JU 6-6719

507-507 St. Mary's Rd., phone CH 8-2377



STUDENT LIFE

THE STUDENTS' WINTER FAIR

By John Neabel.

The 1960 Students' Winter Fair was held on February 12th and 13th. This year the Fair Board chose "a New Decade in Agriculture" as the theme of the Fair. This was appropriate because we are presently entering a new decade and through the medium of displays we were able to reflect in the past and predict scientific achievements of the future.

The Fair of 1960 would probably seem very different from the first one held in 1947. Many competitions, such as wood work competitions, have been replaced by Educational displays and "Open House". These changes are to be expected because Agriculture itself has undergone many significant changes since the fair's inauguration. The Fair still affords the student the opportunity to acquire practical experience as well as organizational ability. The general public is also given an opportunity to see what is going on in our Faculty.

It should be emphasized that the organization of this fair is entirely in the hands of the students. Besides the board itself, credit is due to the members of the various departments for their invaluable advice and to the students who worked behind the scenes to make our fair a success.

On Friday the first day of the fair a judging competition was held. The Grand Aggregate winner was Floyd Wilson, a 3rd year Degree student from Togo, Sask. The Educational displays and handicrafts exhibits were also judged on Friday. The display built by the Engineering option was awarded first place.

The Official Opening of the Fair took place at the rink on Saturday afternoon. This was followed by the Championship

Livestock Showmanship class which was won by Ted Aime of Clandeboye. In the special showmanship class participated in by the Home Economics girls, Miss Connie Short was awarded first prize.

Following the Showmanship classes our "Open House" of the Faculty was held. This is becoming an increasingly important feature of our Fair in that it provides the public an excellent opportunity to become acquainted with the type of academic activities in which the Agricultural students are involved.

Trophies and prizes were awarded to the winners in each class during the evening program. Climaxing the awards presentation was the presentation of the Grand Champion Showmanship trophy by the Manitoba Winter Fair to Ted Aime and the Grand Aggregate award by the T. Eaton Co. to Floyd Wilson. Both of these students will represent our Faculty at the University of Saskatchewan's "Little Royal" in March through the courtesy of the Winnipeg Grain Exchange. This was followed by the crowning of Miss Aggie Winter Fair for 1960. This year Miss Judy McKenzie representing Diploma I won the coveted award over five other very charming candidates. The students then presented a very interesting and entertaining program featuring talent from both Home Economics and Agriculture.

Summing up, I feel that this year's fair was one of the best to be held in that the quality of the exhibits, displays, and all competitions was unsurpassed. Combining this with a record attendance, I feel that this gives me justification to say to the Fair Board and Student body — WELL DONE!

COMPLIMENTS OF

GEO. H. FLANIGAN & SONS LTD.

LIVE STOCK COMMISSION AGENTS AND ORDER BUYERS

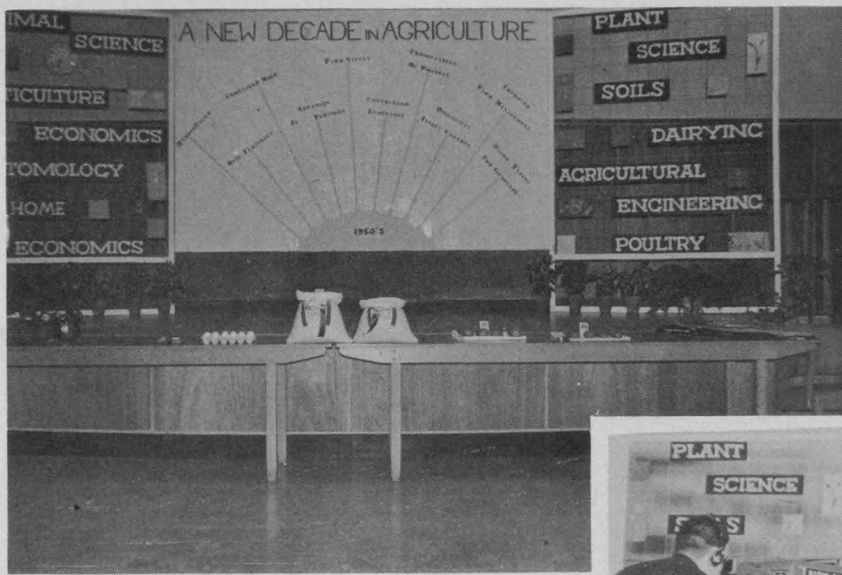
UNION STOCK YARDS

St. Boniface, Man.

ROY L. FLANIGAN
Res. Phone HU 9-2024

OFFICE
CH 7-1493

HARRY S. FLANIGAN
Res. Phone GL 3-1842

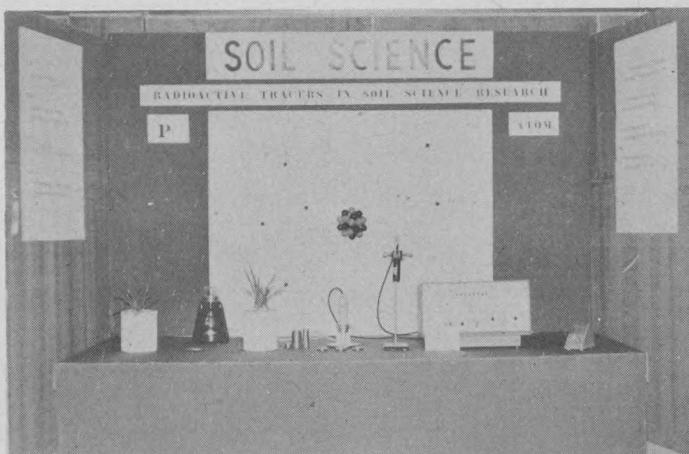


The central display in the Agriculture Auditorium.

The Winning Option Display depicting Safety features on the farm (Ag. Engineering). John Neable is being interviewed by CBC.



Showmanship at the Arena.



Second prize winner for the displays



MC Chuck Framingham introducing the prize winners.



TO THE AGGIE GRADS OF 1960
*"I extend to you my warmest congratulations and
 my sincere good wishes for the future."*

MORLEY MULLIN B.Sc.A., Representative



H. V. WILLIAMS, C.L.U., Mgr. - 302-208 Edmonton St.

Pembina and Dowker



GLobe 2-2397

GATEWAY SERVICE



Dave Adrain and Frank Hornby
Dealers

Guaranteed Tune-up Service
Towing - 1
Free Pickup and Delivery

SEED SERVICE As Wide As Your Needs

For over **SEVENTY YEARS STEELE BRIGGS** have been selecting and supplying to the people of this country seeds suitable for the Canadian climate.

THE SAFE, SURE WAY TO SUCCESS is to use **STEELE BRIGGS' SEEDS AND SERVICE** when planning and planting your garden this Spring.

GIVE THE YOUNGER FOLKS A CHANCE AT THE INTERESTING HOBBY GARDENING

ILLUSTRATED CATALOGUE FREE ON REQUEST
ALSO LIST OF SPRING BULBS, GLADIOLI, DAHLIAS, BEGONIAS, ETC.

STEELE BRIGGS SEEDS LIMITED

Also at Regina and Edmonton

WINNIPEG 2 — 139 Market Ave. East — MANITOBA

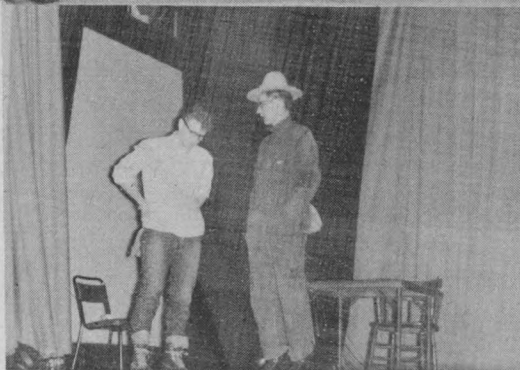


GENTLEMAN, THE QUEENS --
Carrol Gustafson, Valerie Mainil,
Wendy Doyle, Dawn Denbo,
Margueret-Ann McDiarmid, Judy
McKenzie.

JUDY McKENZIE HAS JUST BEEN
CROWNED BY DR. J.C. GILSON.



Wilf Holtmann entertaining.



The Skit featuring here
Gaylen Armstrong and Bill Poole.



THE DIPLOMA GRADS AT GRADS' FAREWELL.

THE SOCIAL SIDE

By Dewitt Mullin,
Social Chairman.

As in the past the Aggies have taken the advice that "all work and no play makes Jack a dull boy" and have shown that social functions are not only loads of fun but a necessary part of our education.

Although Freshie Week activities were limited due to the new rulings of the Administration, Publicity Chairman Don Stammen was very successful in creating an interesting programme for the Freshman. On Saturday afternoon, September 26, the freshies paraded down Winnipeg streets in bibs and diapers. "Scientific, not Scent-ific" was the theme of the Faculty float and depicted the progress of Agriculture in scientific methods. Heather Miller, a blonde, blue-eyed Home Ed. freshette, was Agriculture's Freshie Queen candidate. The initiation banquet, held in the Girl's Canteen on October 8, was attended by approximately fifty diploma and degree freshies, many of whom were brought before a western style court and judged accordingly. Freshie week activities were concluded with a Get Acquainted Party held in the Aggie Auditorium. Many students turned out and together with the Home Ec. freshies seemed to show that they had already learned much about University life.

The Annual Fall Banquet was held at the Highwayman on October 24. This banquet is for all Faculty members but freshmen are encouraged to come out and get a true impression of the seniors who appear so heartless during Freshie Week. Honorary President G. C. Hodgson provided the after dinner address in which he gave a brief but informative speech on the new curriculum in Agriculture and its intended effect on Aggie. Grads. Alex Cruickshank provided very appropriate music for the dance which followed.

On Friday, November 20, the Aggies joined forces with Home-Ec. to give the University its one and only Barn Dance. The UMSU gymnasium, gaily decorated in faculty colors, depicted the atmosphere of a true barn dance. The perennial Jimmy Gowler returned with his western orchestra to supply the music for what turned out to be the most successful event of the year. A large crowd, appropriately dressed in blue jeans, plaid shirts and white stetsons (white at the outset of the evening) danced to polkas, square dances, etc.

The highlight of the evening was the presentation of the beer stein to the top beard owner. With a number of healthy beards in the competition the judges had to carefully study texture, density, length and, unfortunately, attachment. Finally Prof. E. H. Lange pronounced Jim Pyatt, Diploma I, the deserving winner. As a consolation prize, John Mabel was presented with a "silver cup", symbolic of fastest growth and best attachment. Dancing continued until 1:00 a.m., which marked the end of the 1959 version of the Aggie-Home Ec. Barn Dance.

The annual Diploma-Teacher's College Dance, an event sponsored solely by the Diploma students, was held on January 15. This event is noted for the large female attraction supplied by the Teacher's College. Herb Driver, the saxophone artist, with his Kadets, supplied the music for this well organized dance.

The Grad's Farewell was held on Friday, March 11 in the Royal Alexandra Hotel. This is the grand finale of the social year, held in conjunction with Home Economics who were proud to celebrate their Faculty's 50th Anniversary. After an enjoyable feast of roast turkey with all the trimmings, the programme commenced with Dean J. R. Weir bringing greetings from both Faculty and the University. Doreen Forbes, incoming Lady Stick of Home Ec. proposed a toast to the Graduates. David Hay, speaking for the graduates, gave the reply. A toast to the Faculty was then proposed by Garry Workman to which Prof. G. C. Hodgson gave an appropriate reply. The Valedictorian Address was given by Elizabeth Lange.

The Hon. George Hutton, Manitoba's Minister of Agriculture, was the guest speaker for the evening.

Home Economics Awards were presented to the deserving graduates by retiring Lady Stick Salley Dotten. The exchange of sticks between Salley and incoming Lady Stick Doreen Forbes then took place. Garry Workman, our retiring Stick, presented the Agriculture Awards. The programme was concluded with the exchange of sticks between Garry and Charles Framingham, incoming Senior Stick of Agriculture. With formalities over, the Grad's moved to the dance floor with Charlie Cruickshank and his orchestra

providing the music. At the stroke of twelve the Grads departed with a thought of regret, as this would be their last University social function.

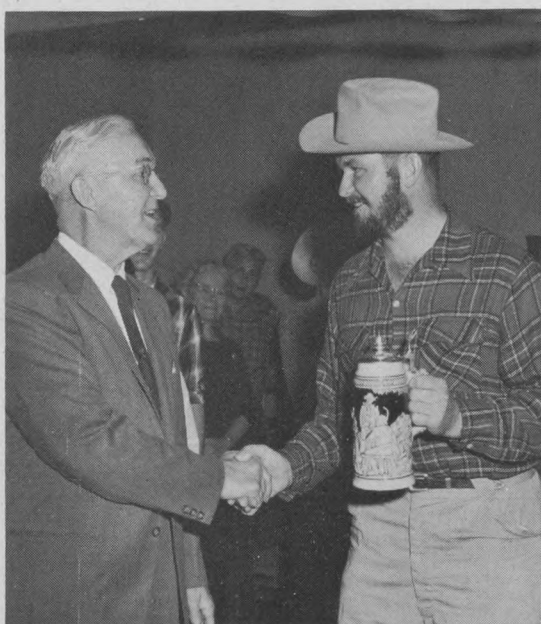
Thus ended the social side of activities for the year. We, of the Social Committee sincerely hope that you have enjoyed the past year's social events as much as we have enjoyed organizing them for you. Good luck in the finals!



THE BEARDS -- Gordon Carpenter, Dave Green, Gill Shaw, Pat Gervin, John Daly (in back row), John Neable (it was false), Jim Pyott, Jim Collinson (front row).



MUSIC MAKERS -- Ed Tyrchneiwickz, Larry Samec, Lorne Ferley, Myron Bugera.



The best "bush" Jim Pyott accepts the beer stein from Dr. W.R. Leslie.



The Aggie Home Ec Barn Dance.

CONGRATULATIONS: 1960 GRADUATES

You have chosen **AGRICULTURE** as your profession.
Help to edify, dignify and promote it.
Support the recognized professional organizations.

MANITOBA AGRICULTURAL GRADUATES' ASSOCIATION

for further information write:
J.J. Comeau, Secretary, c/o 306 Hamilton Bldg.

compliments of
MANITOBA DAIRY and POULTRY CO-OPERATIVE LTD.
Owned and Operated
By and For
Its 35,000 Members
With
14-Creameries 30-Egg Stations 5-Poultry Processing Plants 1-Chick & Poultry Hatchery
**Serving Dairy and Poultry Producers
of Manitoba**

Winnipeg Egg and Poultry Plant,
Salter & Sutherland Ave.

Head Office and Creamery,
570 Roseberry St., St. James, Manitoba.

FULL LINE OF SPORTING GOODS,
JACKETS, UNIFORMS, ETC.

CURLY HAAS SPORTS CENTRE

266 Portage Avenue

Phone Whitehall 3-0531

Buy Oakland Chicks and Turkey Poults
for better results

OAKLAND HATCHERIES LTD.

WINNIPEG
Ph. SP 4-7471

BRANDON
Ph. PA 6-2515

DAUPHIN
Ph. 3321

MARKWILL INDUSTRIES LIMITED

" C H E R O K E E "

HYDRAULIC HOISTS FOR FARM TRUCKS - DOUBLE AND SINGLE ACTING
CAPACITIES 4 TO 9 TONS

ALSO GRAIN LOADERS, BALE ELEVATORS, FARM WAGONS, WHEEL SKIS,

450 Youville St., St. Boniface

FIELD SERVICE TANKS AND T.V. TOWERS.

Phone CHapel 7-4804

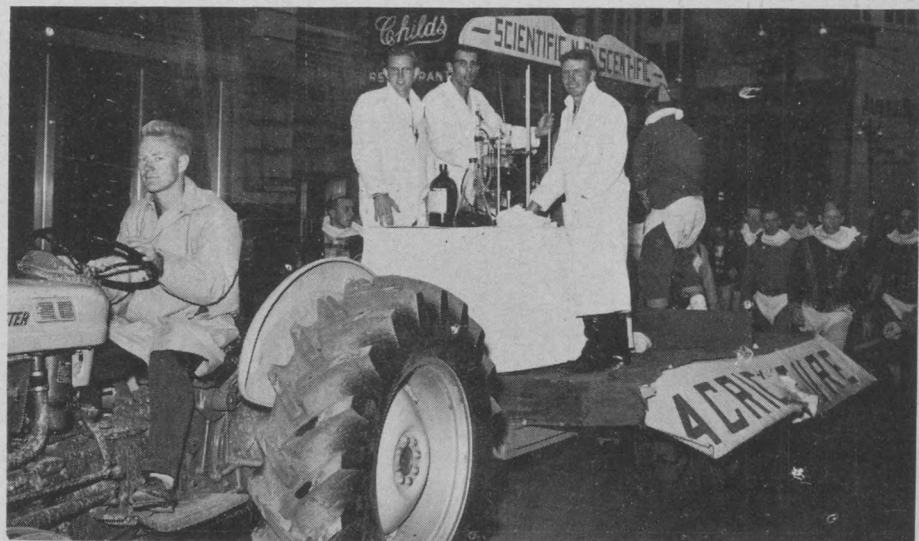


The Degree Grads at Grads' Farewell.



Senior Stick Garry Workman; Stick-Elect Chuck Framingham.
(Foreground) - Hon. & Mrs. G. Hutton.

The Faculty's Freshie Parade Float.



SPORTS 1959 - 1960

By Dave Ashton.

An athlete has been defined as one who successfully combines mental alertness and co-ordination with physical fitness and control. Under this classification the 1959-60 Aggie sports enthusiasts rate an "A" on willingness to participate and ability to win; for the inter-mural high point standings of March 5 showed this faculty just twenty points behind Engineering with four major sports yet to be completed.

Large entries in badminton, swimming, rifle, handball and ping pong were features of the year's activity. Aggies faced Aggies in badminton and handball competitions because of their numbers, with Gord Carpenter and Jerry Ilchyna reaching the semi-finals of the latter event.

The annual track and field meet held at Sargent Park in early October was dominated by a group of first degree students whose efforts brought a third place finish for the faculty, just four points off the pace. Fred Kroger, Gord Carpenter, Tom Cooper, Colin Stockhausen, and Didzus Zuzens received a number of seconds and thirds plus a first in the pursuit relay. Later in the month large entries in the "Cross Country" race brought more laurels to the faculty in general and to Didzus Zuzens in particular who was chosen as a member of the university's distance team which competed at Saskatoon.

Three football teams competed in league play under less than ideal field conditions. Convenor Ken MacKay reported a number of wins followed by a narrow loss to Education rounding out a very successful flag football season. At the same time, Dr. Stothers was coaching his six-man outfit to a three and two record with little or no trouble from injuries. The defensive squad led by Jack Manns established a reputation for mass tackling and rugged play. At times, the opposition gave up the ball without a fight in order to repair the wounds dealt out by Webster, Boyd, and Forbes. However, little relief was to be found in the Aggie offence which featured a stout front line backed by considerable running power in Mullin, Armstrong and Allen. Their ability to navigate the soggy field accounted for most of the one sided scores piled up in the league. Allen unwound his passing arm at times, hitting Heise and Stewart for touch downs. Aggie supporters

had plenty to cheer about when their favourite team took to the field.

Ample award was obtained by the soccer enthusiasts as they swept league play and narrowly missed a championship in the final game. Convenor Neil Cameron did a fine scouting job and revealed his findings only in the final three games when the newcomer, Dewitt Mullin, went on a scoring rampage to save the day.

Shortly after Christmas three teams entered their respective leagues for what turned out to be a very successful hockey season with two groups reaching final competitions. Team 3 played heads up hockey but lacked scoring potential and consequently missed the play-offs. Team 2 finished league competition in second place and lost in the final game to the Engineers in a heart breaking overtime session. Team 1 was never beaten in eight league games while collecting three shut-outs. The hockey trip to Gladstone proved a success on the scoreboard as well as socially. In the final against Architecture the fellows took two periods to adapt to the faster style of game played by the senior league representatives. A fine come back in the third period was not enough to overtake the speedy droughts-men. Wonderful support was given the team all year, and at times the opposition wondered if the greater threat came from Aggie fans or players. In the stands, Don Stammen provided plenty of excitement while on the ice, Rich Goulden and Dan Allen led in scoring with Webber and Gray seeing a lot of action at the blue line. Poirier earned the respect of every goal tender for his tremendous slap shot while Shaw, Green, and Wilson provided much of the fight in the corners. In goal, rookie Lloyd Campbell was outstanding with three shutouts and a remarkable goals against average. Jack Heise and Rich Goulden were named to the university all-stars denoting the ability possessed by these two stick handlers. Rich was recognized by all throughout the season as the best centre in league play. With only Dave Hay and Jack Wilson expecting to graduate, the team should be a winner again next season. Jim McKinney was the only Aggie playing with the University Bisons and we were proud to see his name on the scoring sheet several times.

Morley Hanford, Jack Manns, Lynn

Chambers, and Roger Chanel placed second in the first event of the University bonspiel and beat all comers in the round robin with Dale Smith substituting for Roger. They went on to the inter collegiate finals finishing a single game behind the champions from the University of B.C.

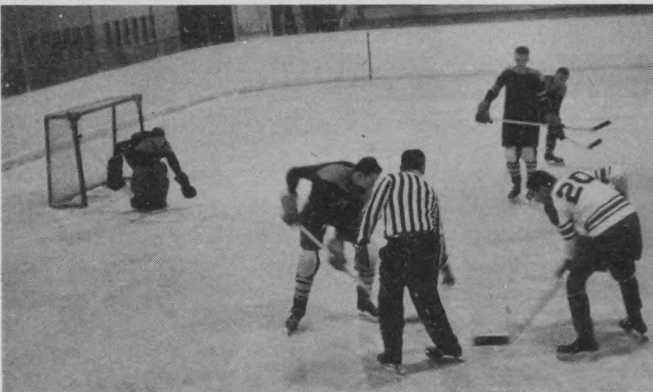
In faculty curling twelve rinks competed throughout the season with a winner yet to be decided. On the inter-faculty sheet, Aggies' team, composed of three rinks skipped by Cooper, Morrison and Mullen reached the final by sidelining St. Paul's, and must wait for Pharmacy and Engineering to decide their opposition.

Ten teams entered the volley-ball leagues this winter and obtained an impressive percentage of wins. Captains D. Green and Hal Behrman guided their teams through the playoffs to the fours and finals respectively.

Hal and the boys gave Engineering I a run in the university championship game but fell just short of their goal.

The basketball teams under the direction of Fraser Stewart lacked only in practice and coaching and won a good share of the games. Barry Gibson and Tom Cooper played with the Junior Bisons where Gibson was often a high scorer.

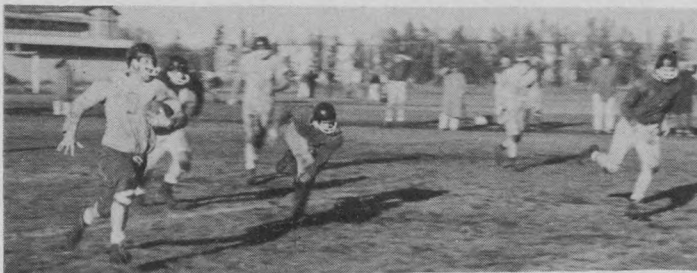
All agree that Agriculture has had one of its best sports years on record with a great deal of credit due to athletic chairman Jack Heise. He was not only a participant on several teams, but an inspiration to others from the day he took office until the year end sports banquet where the letters and trophies presented were ample proof of a job well done.



It was an off side.



Our Champs - Morley Handford, Jack Manns, Lynn Chambers, Dale Smith.



Football in Action.



Our Hockey Team.

LITERARY and DEBATING

By Wilfred Holtmann,
Literary and Debating Chairman.

Many students have likely heard it said that one of the best ways to get the utmost out of things we do is to enjoy ourselves when we are doing them. Most students do realize that one learns things from participation in debates, speaking contests, plays and skits; things which are not easily obtained from our lectures and examinations. But, you may ask: "How can I enjoy myself when I am speaking in front of a crowd or acting in a play?" Strange as it may seem, you can enjoy yourself immensely in these extra-curricular activities and at the same time obtain invaluable experience. All that is required of you is to take that first very difficult step, and once you are in, it can easily progress to the point that you really want to get up in front of a group and debate or speak on some topic about which you are eager to present your views; just as eager as you would be in a private discussion with your fellow students.

Those who have participated this year in this type of extra-curricular activity deserve great praise for their initiative and courage. To those who did not enjoy the pleasure of these experiences may I say: "Take up these opportunities. There is no better time than the present. Everything is to be gained, for nothing can be lost."

Student assemblies are an integral part of our faculty and their importance becomes greater each year as our faculty increases; therefore we must do our utmost to improve and maintain student attendance by (1) making the students realize the importance of attending, and/or (2) by providing a form of student assembly which will make the student eager to attend. It appears that the latter is perhaps not the best method but the most effective.

This year 19 student assemblies were held. We had the honor of a talk from the Honorable George Hutton, Minister of Agriculture, several travelogues, 2 films, a musical program, a debate, skits, and a few girls from Home-Ec. Attendance at student assemblies has increased over last year and with a little more effort and improvement, this trend should continue.

A total of 13 intra-mural debates were held this year on several interesting topics such as the coloring of margarine, deficiency payments, segregation and key holes. This

indicates that approximately 25% of the students participated in debates. Keep up the good work gentlemen! The championship debate was held on March 4th at student assembly with Gill Shaw and Dave Ashton upholding the negative of the topic: "Resolved that deficiency payments are a solution to Canadian agricultural problems." defeating Nelson Skomorowski and Harold Behrman.

In the Dingwall Debating League, Agriculture gave a splendid show again this year. We won 3 debates on split decisions, 1 by default and lost 2 on split decisions resulting in a total of 10 points. This unfortunate situation prevented our chances of competing in the Dingwall Finals this year.

Nine contestants participated in the public speaking contest and 3 students from second year degree, namely Dave Ashton, Ken MacKay and Mel Welber were chosen as the best speakers. These three finalists presented their speeches a second time at the A.I.C. meeting on March 7th. Ken MacKay was chosen the champion speaker.

Agriculture along with Home-Ec. entered for the first time this year in the Drama Festival. We discovered that even in this field we have an abundance of talent. We can look forward to using more of this talent next year in showing others that we have the best and most talented faculty in the U. of M. Along with other plays we presented the comedy: "The Courting of Marie Jenvrin". The actors were Don Waddell, Fraser Stewart, Howard Casper, and Erhart Zirk. Actresses were Erika Holtmann and Margaret Ann MacLeod. In competition with 8 other plays, we were very pleased to obtain the following awards:

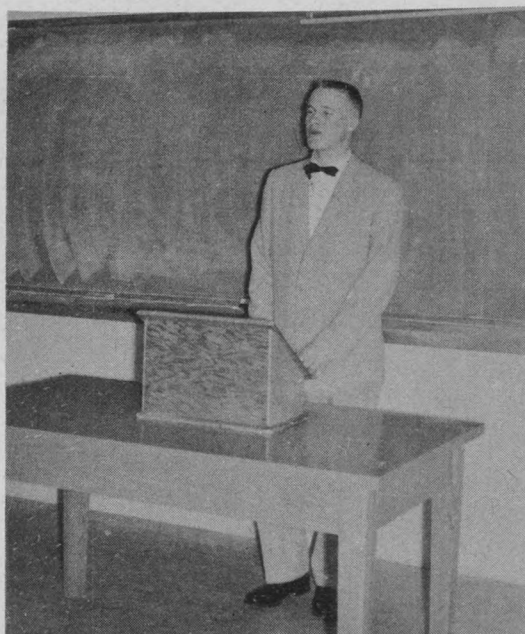
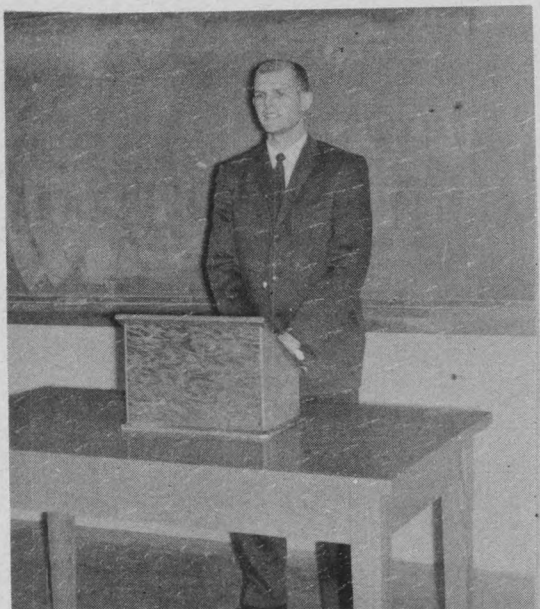
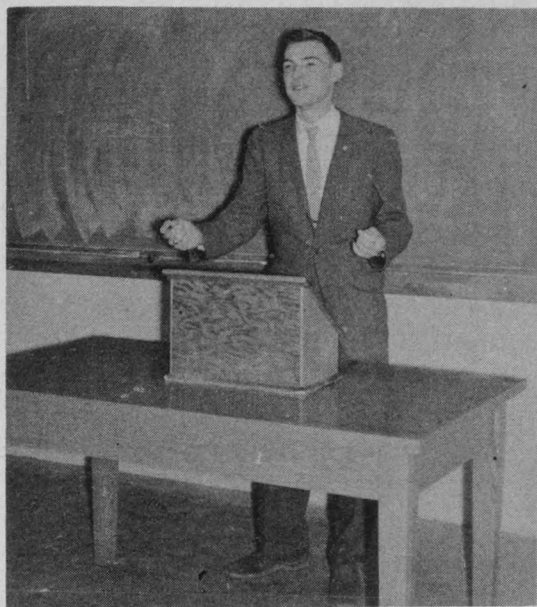
Nomination for best play.
Best actress - Erika Holtmann.
Best supporting actor - Don Waddell.
Nomination for best actor - Fraser Stewart.

Lastly, I would like to once more congratulate all those who were active in debating, public speaking and drama. I also wish to thank all the students and professors who helped me carry out my duties as literary and debating chairman. I sincere-

ly appreciate your constant willingness to fulfill my requests.

In closing may I quote from Thomas A. Edison: "I never allow myself to become discouraged under any circumstances . . . The three great essentials to achieve anything worth while are, first: hard work; second: stick-to-itiveness; third: common sense".

Top orator making a point on Immigration Laws in Canada - Ken MacKay.



Public Speaking Finalists
Dave Ashton and Mel Webber.

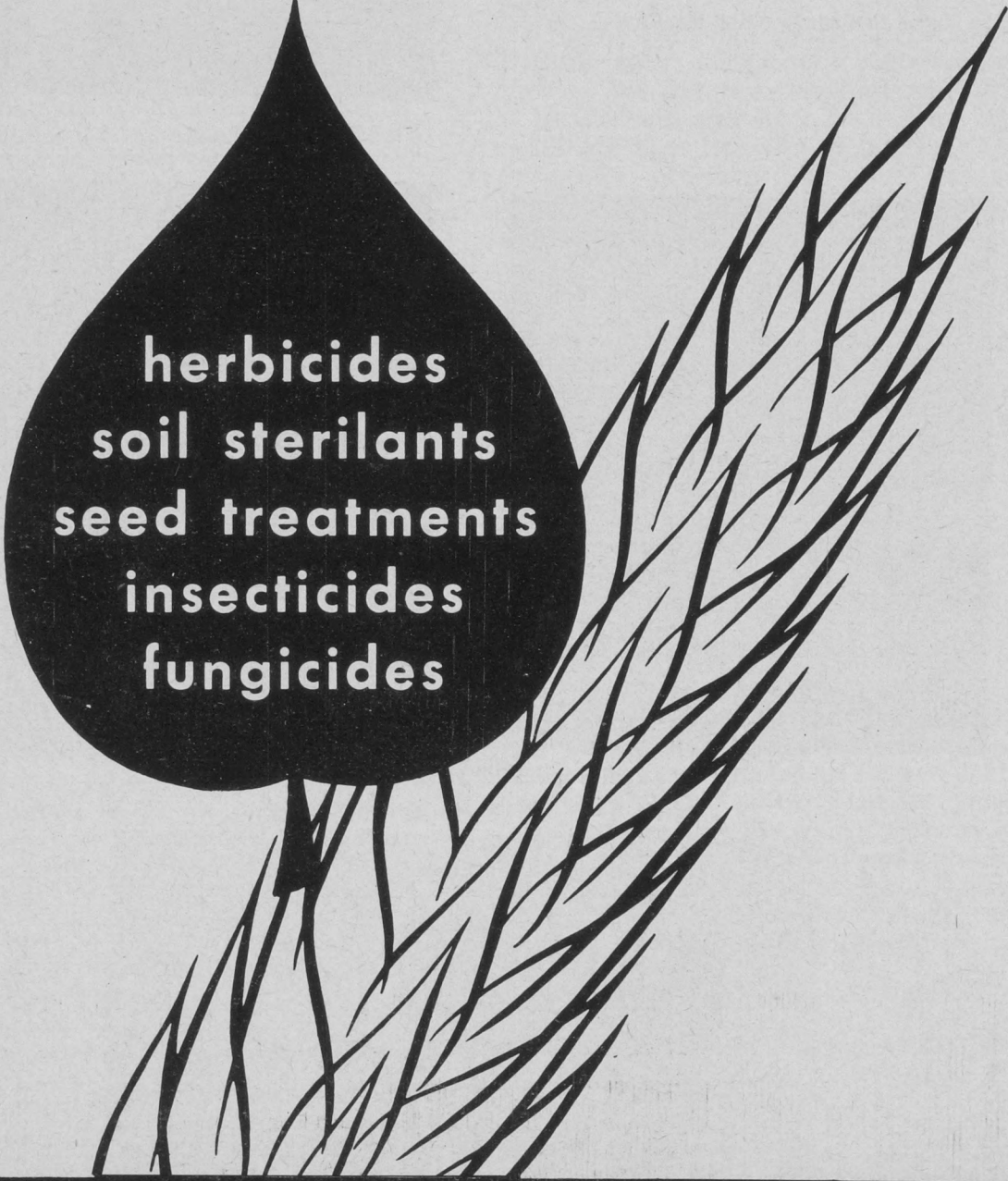


The four debating finalists, Harold Behrman, Nelson Skomorowski, Dave Ashton, Gill Shaw.

COMPLIMENTS OF

STANDARD CHEMICALS LIMITED

AGRICULTURAL CHEMICALS

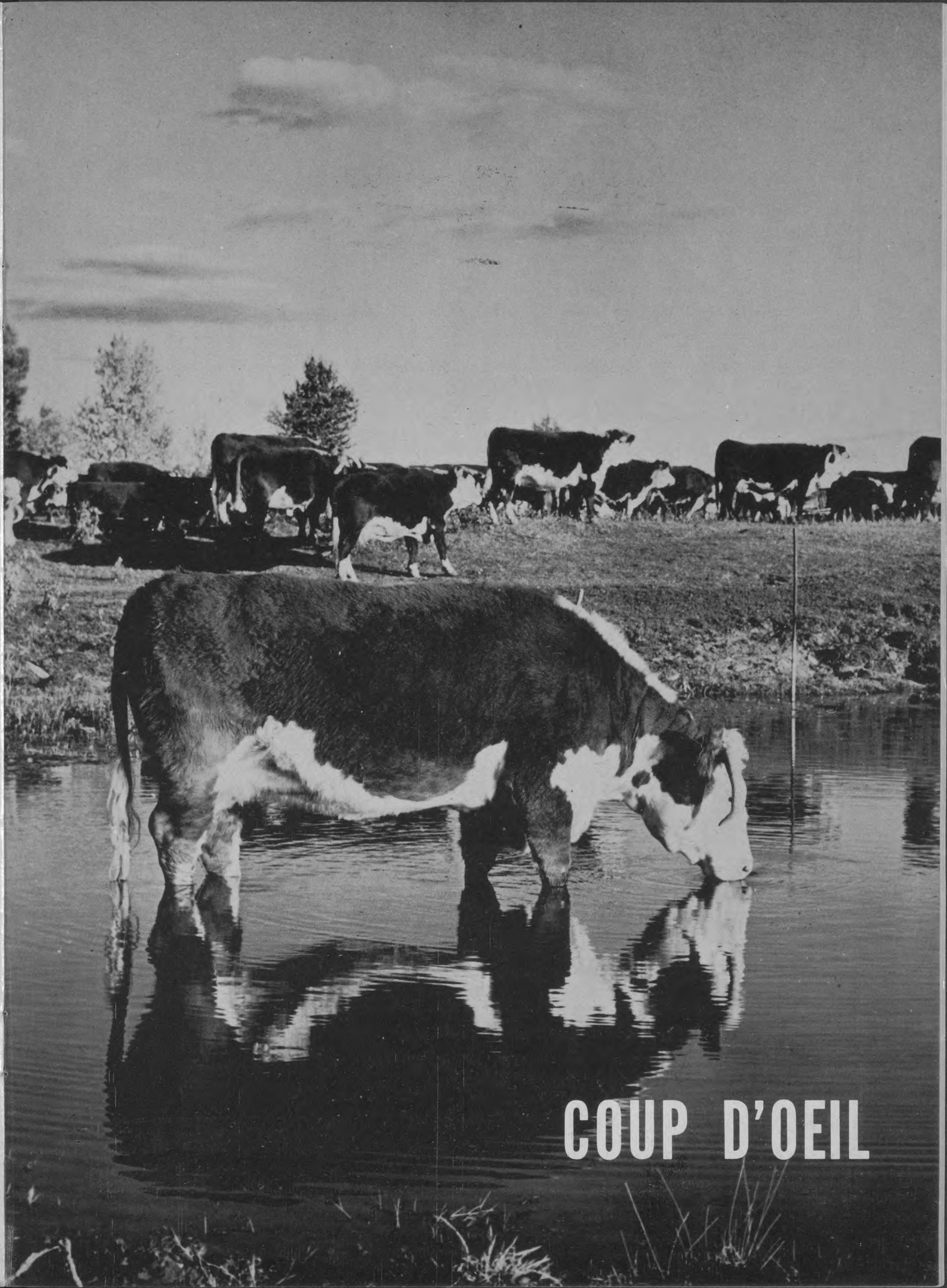


**herbicides
soil sterilants
seed treatments
insecticides
fungicides**

STANDARD CHEMICAL LIMITED

SUBSIDIARY

PITTSBURGH PLATE GLASS COMPANY



COUP D'OEIL

BOOKS and SUPPLIES

The University operates the Book Department to supply all text books and supplies required by students.

OUR CONSTANT AIM — THE LOWEST PRICES IN CANADA

Text books for all faculties. General stationery. Zoology dissecting sets.
Botany supplies. Novelties.

The University of Manitoba Book Department

CANADA'S GREATEST COLLEGE STORE

It may HAIL . . .

But

YOU CAN HAVE PROTECTION WITH A

CO-OP HAIL POLICY

- LOSSES PAID PROMPTLY AND IN FULL
- SAVINGS ARE THE PROPERTY OF MEMBERS
- THE BOARD YOU ELECT DIRECTS THE COMPANY
- 225 AGENTS THROUGHOUT THE PROVINCE READY TO SERVE YOU.

Head Office for Manitoba

- - -

804½ Sargent Ave., Winnipeg

ECONOMICS

IN THE SERVICE OF LEGISLATORS

By R. TRIFFON

Affairs which pertain to production and the distribution of wealth are usually referred to as economic. When we speak of economic policies of a government we usually think of policies which are destined primarily to influence the state of production or the manner of wealth distribution among different individuals in the community. It is not hard to see, however, that every action by government, central or local, has economic aspects, for the government in its normal functioning must employ resources, human and otherwise, and must affect the distribution of wealth, whether it does that by levying taxes or by printing more money. Consequently when a government sets itself targets in the field of education, defence, or health, it must evaluate in advance the likely impact of its scheme on the economy. When it drafts an economic policy such as development of national resources, stability of the currency, or restriction of imports, the impact of its action upon the economy is not a side effect, but the major objective, and it must see to it that the ball would land where it was aimed.

It is quite appropriate therefore to conceive a scientific discipline relating to the economics of government action. If the action of government is taken on a very small scale its economic impact may not be noticeable, but generally government action is fairly extensive, reaching its peak in times of national emergency, and tools are necessary to evaluate quantitatively the situations "before" and "after".

The economics of government, which some people like to associate with Political Economy, is, mathematically speaking, a function in many independent variables. A multitude of households and a multitude of firms are affected by government action and respond to it each in its own way, though not in isolation. Once a change has occurred anywhere in the economy, reverberating effects are immediately noticed elsewhere and additional changes follow, either at a receding or an accelerating rate.

In order to predict how government action would affect production and distribution, or in order to devise effective means to induce a desirable change, the elementary units of decision making must be carefully

studied. This level of study is known as *micro* economics and it revolves around the contemplations and behaviour of autonomous producers and individual consumers. The aggregate changes which result from micro-adjustments constitute another level of study known as macro-economics, and it can be described as a bird's-eye view of whole industries, groups of industries, and the aggregate of consumers. There is a good reason to believe that if the micro units in the economy, namely individual consumers and producers, were in a position to foresee the aggregative effect of their individual adjustments, economic conditions would have been much more stable than they are. Macro-economics, therefore, as it is continuously developed, provides individuals, particularly producers, with a new perspective in their decision making.

Economics is in this fashion made up of micro- and macro-economics, which are essentially two phases of a continuous observation. They cannot be completely separated from each other. The whole discipline can be regarded as a science in as much as it attempts to explain the cause, as well as predict the results, of quantitative changes in production, distribution, and consumption.

Here are some examples of quantitative problems with which the economist is concerned. Each of these examples naturally constitutes only one *phase* of a continuous inquiry.

In the field of consumption, economists try to answer questions like the following:

- (a) How much more, or less, will a consumer buy of a given commodity if its price falls by a given percentage?
- (b) How much more, or less, will a consumer buy of a given commodity if his *income* rises by a given percentage?
- (c) How much more, or less, will a consumer buy of a given commodity, if a related commodity becomes more expensive by a given percentage?
- (d) By how much will a consumer increase his savings if his income rises by a given percentage?

continued on page 55
PAGE 53

CONGRATULATIONS TO . . .

THE GRADUATING CLASS

Compliments of

Massey-Ferguson Limited

1325 Ellice Avenue ---- Winnipeg

A Complete Farm Machinery Service

COMPLIMENTS OF . . .

THE FARMHAND COMPANY

1270 SARGENT AVE.

First in Farm Materials — Handling

COMPLIMENTS OF . . .



**James Richardson & Sons
LIMITED**

Active in all phases of the
Canadian Grain Trade

Congratulations, graduate!

Au Revoir,

. . . But not goodbye. We hope to see you on the campus again, bringing up to date that education in which you have a sound foundation. And we hope, through the services of our office, through the Alumni Journal and through branch and faculty organizations, to help you maintain warm and mutually beneficial ties with University and old friends.

Please help us to do this well by being an active member of the Alumni Association.

THE ALUMNI ASSOCIATION

Third Floor - Union Bldg.

FORT GARRY CAMPUS

Phone GR. 4-9330

ECONOMICS IN THE SERVICES OF LEGISLATORS - -

continued from page 53

The answers to such questions depend largely on personal tastes and psychological attitudes which frustrate attempts to formulate exact and universal "laws". To overcome the difficulty, economists have devised a common denominator to all problems of consumers' choice called "utility", but as yet no satisfactory measuring rod has become available. Consequently economists often try to correlate statistically series of prices and purchases, as they occurred in the past, from which they try to extrapolate into the present and the near future.

In the field of production, economists try to answer questions like the following:

- (a) How much more will a firm produce of a given output if its price rises by a given percentage, or if the price of a resource falls by a given percentage?
- (b) How much more will a firm buy of one resource if another resource becomes more expensive by a given percentage?
- (c) How much more will a firm produce of a given commodity, if a new resource, x times more efficient than an old one, becomes available at a given price?
- (d) How much more would a firm produce of a given commodity if its price ceases to fluctuate?

Here again we encounter serious difficulties of measurement, not only because the reaction of producers to changes may depend on subjective pessimism or optimism, but also because the alternative courses of action ("opportunity costs") open to individual producers at any one time vary greatly from one case to another. Similarly the reaction of the individual producer may depend on the state of competition in his industry and on possible "collusion" between competitors. A whole field has been developed in economics to theorize the possible strategies of firms under different degrees of rivalry, and the impact of these strategies upon the well-being of consumers. Anti-trust laws and other regulatory measures for the preservation of "fair competition" in many countries are guided by the economic theory of rivalry.

The questions which have been mentioned above for example can be readily seen to pertain to the issue of agricultural policy. The purpose of agricultural policies generally is to guarantee an efficient and sufficient food production for the population,

while securing a stable income for the farm community on an equitable level.

Economics does not tell us what is and what is not equitable, since this is a philosophical question. But economics can tell us by how much is the income of farmers likely to rise or fall in relation to incomes of other groups if certain events are made to take place. Upon a given definition of an equitable level of income, (for instance "parity" with incomes of other groups in some year in the past), the first job of the economist is to tell why, if this be the case, farmers' income is below the equitable level. The explanation to no small extent lies in the fact that consumers are not as responsive to a fall in the price of food as to a fall in the price of other commodities. In addition farmers cannot quickly adjust their output, and they do not act in concert, although they generally move up and down the hill together. The transition from micro to macro economics is demonstrated here with great clarity: If only a few farmers make an adjustment to a changing price, they are likely to be better off. If all farmers do that, they are likely to be worse off than before. The factor of aggregation, the bird's eye perspective, must be taken into account. Occasionally governments overcome this difficulty by establishing marketing boards which assign strict production quotas to individuals. Alternatively governments guarantee "forward prices" to farmers, and effectuate them by entering the consumers' market as a buyer. It is essential that forward prices should not be so high as to result in increasing stocks of food in the government's backyard. Therefore the likely reaction of farmers to various price levels must be fairly accurately estimated.

Instead of price guarantees, governments can supplement farmers' incomes by direct ("deficiency") payments. In this instance prices of farm products are likely to fall, and it is essential to determine exactly at what level of direct support the farm industry is compensated just for structural difficulties (such as have been mentioned above), and not for over-production. Over-production in this context occurs when market prices cease to serve as a guide, or "traffic signals", to producers, and consequently productive resources are not utilized to the best possible advantage of the whole community.

In a much similar way economics can be called upon to estimate the possible effects of a new import tariff, of a new government loan, or a new immigration policy. While, as we have said, economics cannot tell us what is a "good" or a "bad" target,

continued on page 61
PAGE 55

YOUR FARM FATE IS UP TO YOU

By CHUCK FRAMINGHAM

I'm sure that everyone with a farm background, whether it be remote or near at hand, realizes that a differential between the welfare of members of any community of farmers has existed from the days of our pioneer settlers until the present day. Why has this differential existed? The answer depends primarily on a single but by no means simple word, "management."

Having accepted the fact that every thriving farm has a good manager, do we as Canadians stimulate improvements in farm management through government policy and all modification of farm economy? No, we don't. Hardly a single radio or television newscast or press issue is released without reference to the question of subsidies and provision of deficiency payments while better management is seldom mentioned. By this I do not suggest that policies involving subsidization are devoid of merit in some instances but they do have limitations. The purpose of a subsidy or deficiency payment is to promote development of industries and enterprises which will develop into self supporting units which can thrive without subsidization and not to provide for the existence of firms which will never "pay their way" unless these firms are of strategic importance and the products of them cannot be proved unless subsidies for their support exist. With this purpose understood we must admit that farming does not require a program of endless subsidizing. If we don't, we are accepting the fact that farming is never a paying proposition under ordinary economic circumstances and such is not the case. Therefore, to subsidize farm enterprises except in the instance where this is essential to the development of economic efficiency in the future, is wrong and is not the solution to the farm problem.

What then, you might ask, is the answer to the existence of thriving family farm units? My answer is "improved farm management which will result in the development of greater economic efficiency in the family farm unit."

To suggest a solution is simple but pursuit of the means of achieving the goal it implies is often difficult. Anyone realizes that countless factors are involved in development of an improved managerial position on the family farm.

One might ask, "What may be done to improve farm management?" At the same time another may ask, "What has been done?"

To answer the latter of these two questions by saying nothing has been done would be wrong. However, to say that little has been done would be quite true. In the past the stress in agricultural research has been placed on development of improved mechanical techniques and better quality varieties for production rather than on improvements in the realm of farm management. Research experts have developed crop varieties with specific adaptation, improved breeds of livestock & poultry and knowledge concerning nutritional requirements of farm animals to mention only a few. However, little has been done to assist the farm in deciding which practices to adopt and how to adopt them for greatest efficiency.

The question "What can be done?" raises an issue which should be considered as a challenge to farm management research experts, extension personnel, government, and most important of all farmers themselves. They, through conscientious study and complete co-operation, can make the family farm an economic unit which can thrive without continuous subsidization. By attaining maximum efficiency of farm operations they will enable family farming to become a "paying" rather than, in many instances, a "losing" proposition. This presents the inevitable question "How?"

The chief means by which this aim may be achieved are through: further scientific research in the fields of farm management and product varieties, techniques, and equipment development; education; a paving of the avenue of continuity between theoretical research and its application; increasing availability of capital to farmers; and legislation to provide appropriate government policy. Pursuit of these means will lead to development of economically efficient family farm units which can and will support "themselves".

A mere statement of the means by which agriculture may become a better business through achievement of greater economic efficiency is worthless. Let us look now at the ways in which these developments can,

continued on page 61

DESTINY AND NATURE

BY RICH HAMILTON

The Riding Mountains, ranging sharply against the south-west sky are so much a part of the scenery that those of us farming on the steep northern side take them for granted without realizing how much they, or rather the great glacier that dropped them where they are, prearranged our farm set-up of cattle and grain.

Just below the foot of the mountains, we live on the Ochre River, remnant of a once-rushing torrent that cut a great gorge through the higher hills, and deposited a layer of rich soil some three miles wide along its course from the mountain to Lake Dauphin. This narrow strip is very fertile land and is bounded on the west by the first bench of the mountain, and on the east by a ridge of stone and gravel, a reminder of the ancient lake which once occupied this area, and receding, left its shoreline.

Consequently, our section of land, made up of the north halves lying to the south of an east-west road, includes a small rise to the mountain on the west, crosses the river, stretches across the fertile strip and advances a little on the first gentle slope of the stony gravel ridge to the east. A mile north of the eastern boundary of our land, situated on the stony ridge, lies our pasture half-section. Some of this pasture land was once broken up and sown to crop but the great number of boulders large and small always rising to the surface resulted in the land being allowed to go back to grass. Yet, this stony land produces good stretches of meadow dotted with poplar and willow bushes and pea-vine undergrowth, and here and there a slough provides water for the summer herd. Fortunately a three-mile trip will bring the herd home from this abundant native pasture to the first class land where the trees along the river shelter our home.

The river obligingly provided a cozy building spot by cutting off the northeast corner of the home farm into a ten-acre isosceles triangle and landscaped the background with large maples and towering elms. These trees, in addition to their scenic value, provide shelter from the winter storms and summer heat, and an undergrowth of bush and fern that is relished by the cattle.

In addition to providing an easy water supply for loose stock in summer, the river has produced this heavy growth of trees

which offers an excellent spot for a large feed lot operation. This feed lot opportunity has determined the course of our cattle production since it enables us to operate on a system part way between large scale grain farming and the open western cattle ranch.

The western ranch idea is carried out in our development of Herefords which do well for us in both pasture and feed lot, and our grain farming provides to advantage the means of successfully rearing feeders for the finished market. This programme of finishing feeders has encouraged us to build up a herd of hardy grazing cows, chiefly Hereford, but including some well-bred Shorthorns which have tended to produce growthy cattle. To further increase the size of our stock, we have branched into a new breed, the Charolais, an imported French breed possessing good growth and size. These we intend to cross with Herefords to produce and maintain a good strain of Hereford type cattle in order to provide superior feeder steers.

Our supply of feeder steers has in some ways come relatively easy because to supplement the twenty bull calves averaged by our own herd, it has been easy to pick sixty-odd feeders from the Lake Manitoba county. This area from Rorketon to the Narrows sends choice feeders to sales in the Ste. Rose areas. All in all, these natural conditions together with further mechanization point the way to an enlargement of our feed lot operation.

Actually, the policy of keeping cattle is to some extent necessary in order to benefit from all of our land since pasture is the only use that can be made of the western side of our home half-section as well as the pasture half-section. This western edge lies on the stony first rise of the mountain and like the ridge pasture to the east provides meadow and bush. Some heavy poplar timber in this pasture provides good summer protection from bull-dog flies and mosquitoes. From this pasture, a fenced runway permits the cattle to range down to the river for water. So this land, otherwise of practically no value helps us out by providing feeders ready for finishing.

This finishing of feeders has become increasingly attractive during these last few

continued on page 63

THE DIPLOMA SUMMER FIELD TRIP

By TOM HAWKINS

The summer tour, one of the main features of the Diploma Course in Agriculture, takes place in the first two weeks of June, between the first and the second years. It is designed to show the students the practical side of the theory which was taught during the first year of the Course.

This summer tour, an innovation in the new Diploma Course, was first made in the summer of 1959. On the tour the students became familiar with most of the major agricultural producing areas of Manitoba. All types of farm enterprise were included in the itinerary. At each stop questions were asked of the operator about the management of his enterprises. This was followed by a tour of the main enterprise and then more questions.

To give a resumé of the areas covered; we spent the first morning touring the plots at the University. In the afternoon we visited an eight acre farm on which 4,000 laying hens are kept. The second morning brought us to a hog and broiler farm which was highly integrated. Then we toured a farm where the hog enterprise was organized in conjunction with the growing of small fruits for local sale. The afternoon took us to a Hutterite Colony and then to a turkey enterprise at Ridgeville where 20,000 birds are reared on range. The night was spent at Altona. The third morning opened with a tour of the Co-op Vegetable Oils plant, followed by a special crops farm at Plum Coulee. In the afternoon we visited a large-scale special crops and seed operation at Winkler. The third night was spent in Morden. The fourth day brought us to the Winkler Co-op Creamery and the Morden Experimental Farm, followed by a feeder cattle enterprise at Morden. Heavy with sleep we spent the fourth night in Carman. On the fifth morning we toured a family farm operated under a partnership and corporation, at Graysville. Next we came to a purebred Shorthorn farm in the same vicinity.

Then, journeying through the Pembina Hills we studied some soil erosion problems in the St. Alphonse-Bruxelles area. The fifth night we moved into the Brandon Agriculture and Homemaking School where we stayed for three nights. In this locality we toured a combined Hereford farm and ranch.

Southwest of Brandon we saw a long term crop rotation carried out on 2,800 acres and including a cattle feeding enterprise. This was followed by visits to a purebred sheep farm and purebred swine enterprise.

Moving north to Erickson, we studied a feeder cattle operation in which performance testing was used. Some time was spent in Riding Mountain National Park on our way to Dauphin, where we enjoyed the eighth night of the tour. Just outside Dauphin we were particularly interested in a farm where the extensive use of fertilizer made summerfallow almost unnecessary. Then we saw the feeder auction sale ring at Ste. Rose du Lac and its operation was explained to us. From there we went to see a purebred herd of Aberdeen Angus cattle near Ste. Rose.

Our journey then took us across the Narrows and into the Interlake country where we rested for the night at Stonewall on the ninth evening. North of Stonewall, at Balmoral, we visited a very efficient commercial hog enterprise. South of Stonewall we compared Charolais with Shorthorn cattle. This was followed by a demonstration of artificial insemination on a dairy farm near Stony Mountain. Near there we also visited a large dairy farm whose owners have eliminated summerfallow and substituted extensive use of fertilizers. From there we went back to Winnipeg for a big dinner to conclude our tenth day and to end a very educational tour.

On the tour we were accompanied by the Provincial Soils Specialist for each area. The Agricultural Representatives, who joined us in each area, gave us additional background information about the agriculture in the region. Those from the Faculty who accompanied us were: Professor E. H. Lange, Professor L. B. Siemens, Miss M. J. MacLeod, Professor H. M. Lapp, Professor K. W. Domier, and Professor M. A. Zwarich.

To the students, this trip was the most interesting part of the new Diploma Course and was also one of the more valuable parts because it puts a great deal of meaning into the theory obtained in class. Many economical and efficient methods of farming were observed and it is hoped that some of these new innovations will be of use to us when we return to our farms.



Toews' laying hen enterprise - (8 acre farm with 4,000 laying birds).



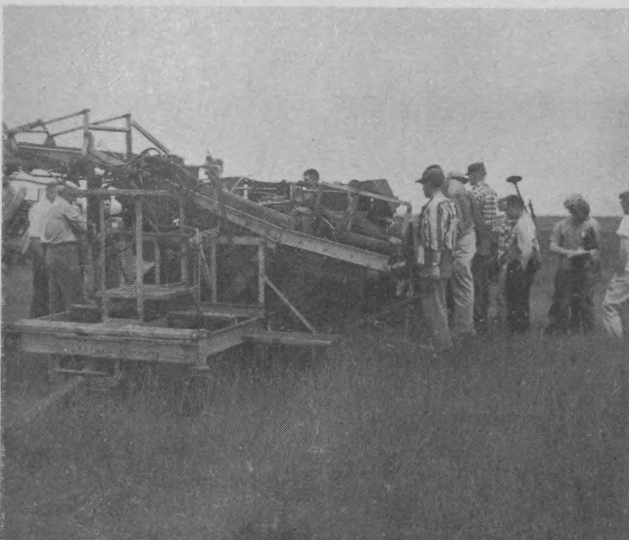
Marcell Cahernell's farm (land reclamation by leveling gulleys).



Tanchak's turkey farm at Ridgeville. (21,000 birds).



Cliff Lundman's farm at Erickson. (performance testing used).



Kroecker Farms at Winkler. (special crops on a large scale).



Cliff Lundman's loose housing of beef cattle at Erickson.



CONGRATULATIONS TO.....

THE AGGIE GRADS OF 1960

from

MANITOBA FEDERATION of AGRICULTURE

610 ROYAL BANK BUILDING,

WINNIPEG.

Since 1903.....

An organization of Manitoba farm families
working for better Manitoba farm living.

Affiliated with

The Canadian Federation of Agriculture
and

The International Federation of Agricultural Producers

hey Gang!

If you eat, drink, dance, relax, sleep, celebrate, shower, shave, get your hair cut, shine your shoes, read or sight-see, **this is your spot.** Your relaxation, comfort, and satisfaction is our business. Ask any graduate. He'll tell you that The Alex has been a yearly favorite with Aggies for decades.

We offer these services:

- Selkirk Lounge
- Selkirk Room
- Saturday night Supper Dances
- Banquets
- New Year's Eve Dance
- Christmas and New Year's Day Dinner
- Conventions

"the Alex"



THE ROYAL ALEXANDRA HOTEL
WINNIPEG, MANITOBA

ECONOMICS IN THE SERVICES OF LEGISLATORS - -

continued from page 55.

it can help us to determine whether a policy can be effective. It often also draws our attention to problematic situations.

In the course of the last hundred or so years, economics has developed into a comprehensive system of theorems, and has demonstrated as well as measured certain regularities in our business life, such as the business cycles. It will reach an entirely new level when in the future the way is found, in collaboration with psychologists and sociologists, of measuring the variables of human decisions.

As it becomes increasingly more complex, the adoption of economics for a hobby by journalists and politicians becomes increasingly more venturesome, yet an indispensable aid for the running of public affairs.

YOUR FARM FATE IS UP TO YOU - - -

continued from page 56.

to use an old expression, lift the face of agriculture.

Firstly, further research in both the physical and social science aspects of agriculture must be pursued with greatest emphasis on the social side. Research to determine the means of decision making, that is, of deciding which enterprises favour integration into one farm unit in specific locales, how many units is it most economical to integrate, in what proportions they should be combined etc. Similarly, scientific research in the physical sciences is essential, since it increases the economic efficiency of farming by lowering per unit production cost, should carry further.

At the same time we must promote further education of farm people. To me, a farmer, to be a good farmer, requires as much or more education than does the manager of any other economic unit, for instance, a large retail store. They are both dealing with all the ramifications of efficient operation and those of the farm unit are of a more obscure nature than those of the retail store. Thus farmers require further basic knowledge and in addition must be made aware of the research developments of current importance.

While the basic education is the concern of our present school and university education system the education of farmers with regard to current research development is the problem which, in instances where farmers do not have direct contact with research personnel, is the responsibility of agricultural extension workers. They should make farmers aware of research developments submitted to them by research experts. Not only should they make them available to the farmer but they should also induce and direct the interests of the farmer in their use. This I feel could best be done by a team of research experts each specialized in one phase of agricultural production. This team of extension workers would pave the way between scientific research developments and their application to practical agriculture.

Without sufficient capital, which many farmers definitely do not possess, this vast fund of knowledge made available to the farmer through the combined efforts of researchers and extension personnel is worthless. Tremendous rehabilitation programs and development of improved techniques possibly through purchase of new breeding stock or equipment would be impossible in many cases if government policy were not established to provide increased capital. Therefore I feel that governmental policy to provide capital in the form of long term low interest rate loans is necessary.

The need for appropriate government policy presents itself in the discussion of availability of capital, of increased education and provision for extension experts. These together with policies to allow for such things as the movement of peoples, unable to develop an economic farm unit under the described circumstance, to urban areas where they can be gainfully employed constitute what is meant by the need for further government policy.

Thus, your farm's fate will be determined if you as a farmer seek out and use the existing facilities and information available and use your influence to persuade government officials of your needs, your farm will thrive, if not, your farm will become someone else's farm. If what I've said seems hard to believe just look around your own community. I'm sure there's at least one thriving family farm and that the manager of that farm is a good one who uses his capital and knowledge correctly and efficiently.

N. M. PATERSON & SONS LIMITED

GRAIN & STEAMSHIP DIVISION

FORT WILLIAM — WINNIPEG — MONTREAL



Thiessen Bus Lines Ltd., Winnipeg, Manitoba

380 OSBORNE

PHONE GLobe 3-0179

Compliments of . . .

THE CORRAL PONY

Drive-In Restaurant

Featuring Big Fella Hamburgers
and Giant Root Beer

1919 PEMBINA

REGGIE...THE HOST WITH THE MOST



NO OTHER WINNIPEG
HOTEL OFFERS SO
MUCH . . .

BANQUET ROOMS, TWO
PARKING LOTS, CENTRAL
LOCATION, POPULAR
RATES.



ST. REGIS HOTEL

285 Smith Street Winnipeg
Phone WHitehall 2-0171



HAMBLEY Electric CHICKS

Since 1927

Four new Hybrid lines for 1960.

- Keyline 110 White Eggs
- 126 3 way Medium Cross
- Sussex 3 way Hybrid
- Barred Rock 3 way Hybrid

Tufford and California Royal Turkeys

J. J. Hambley Hatcheries Ltd.

WINNIPEG, BRANDON, PORTAGE, DAUPHIN,
REGINA, SASKATOON, EDMONTON.

Congratulations to . . .

THE GRADUATING CLASS

THE CO-OPERATIVE UNION OF MANITOBA

448 Pembina Highway — Winnipeg

DESTINY AND NATURE - -

continued from page 57

years since the quota system limited the sale of grain to such an extent, depressing the price and restricting sales. Likewise, the stored grain has sometimes deteriorated and lowered its market value. Consequently, a livable income can be realized only through feeding the grain to steers for the finished market.

Additional feed grain has been produced in great quantities in our area for the past several years when rain delayed seeding and retarded the harvest, producing late grain, feed oats and barley, and lowering the grade of wheat. Here again, the feeders came to the rescue.

In another way the nature of our land encourages the development of feeder cattle, because we have some good land which never requires to be cropped with hay and as a result produces enough grain to more than fill our quota. Ordinarily, this surplus would require storage and this storage would decrease the overall income. It can be turned to better advantage by feeding it and converting it to a less bulky and more valuable product, finished beef. So the quota situation has caused our feed lot increasingly to become the answer to the puzzle of production.

Our livestock likewise enables us to carry out a systematic arrangement of crop rotation, essential to the heavy gumbo land bordering the creek which carries the run off from the ridge bordering the eastern half. Three 75-acre fields are rotated with hay and grain, two of these always producing hay while the third is summerfallowed or seeded to grain. The hay we grow is generally alfalfa which produces maximum tonnage. The feeders like it, and the alfalfa which produces such good returns by means of the feeders is doubly justified because it keeps the gumbo workable by means of its strong,

penetrating roots. Indirectly, it and the feeders contribute again to the soil enrichment through the cheap fertilizer provided.

This production of hay and the feeding of cattle has, for us, become more and more important because farm help has become very scarce and very expensive. A straight grain project requires intensified operation in a very limited time. Large areas must be cultivated, seeded and harvested within a fairly short period of work time. For the remainder of the year on a mechanized farm, there is little to do. However, the diversified programme offers year round employment which can be handled by fewer people, sometimes by the family alone.

This idea of living round the year on the farm may not be appreciated by the suit-case farmer whose land means only a few days of high pressure seeding, combining etc., with the rest of the year spent elsewhere. He is virtually an absentee farmer and as such represents a great transformation in farm life, the increasing of the size of holdings and the desertion of rural areas. For some, this way of life is attractive. Others, however, like the land and enjoy the sharp smell of fresh turning earth and the scream of the gulls swooping down on the furrow. And some like to feed cattle, not only for the essential business of balancing the budget, but also because of their interest and pride in a good herd. It's all a part of a farm being a home.

Consider it as you will, the feeder pays his way for us, and so far he has paid very well, and if you wish to ignore his practical value, you can turn to poetry. You'll find written in a school book that "A thing of beauty is a joy forever."

As far as we are concerned, a good healthy herd of clean, whitefaced cattle, all looking up at you, improve the green of any landscape.

Especially, if the blue of the Riding Mountains lies beyond them.

SERVING FARMERS

FROM BORDER TO BORDER IN MANITOBA

MODERN DAIRIES LIMITED

INDEX TO ADVERTISERS

Alumni Association, The.....	54	Manitoba Dairy and Poultry Co-op.....	44
Armstrong Commission Company, The.....	28	Manitoba Farmers Union.....	6
Armytage Farm and Auto Service.....	16	Manitoba Federation of Agriculture.....	60
Brett-Young Seeds Ltd.....	14	Manitoba Packing Ltd.....	15
Buffalo Farm Equipment Supply Ltd.....	14	Manitoba Pool Elevators Ltd.....	
Canadian Co-operative Implement Ltd.....	33inside front cover	
Chipman Chemicals Ltd.....	16	Markwill Industries Ltd.....	44
Clover Crest Honey.....	16	Marchant Calculators.....	4
Cockshutt Farm Equipment Ltd.....	36	Massey-Ferguson Ltd.....	54
Co-operative Hail Insurance Co.....	52	McLaren Hotel.....	36
Co-op Union of Manitoba.....	52	Miller Hatcheries Ltd.....	14
Crescent Creamery Ltd.....	14	Modern Farmer.....	15
Curly Haas Sports Center.....	44	National Grain Co. Ltd., The.....	8
Dangerfield Hotels, The.....	38	North American Educational Guild Ltd.....	8
Equitable Life Insurance Co. of Canada.....	40	Oakland Hatcheries Ltd.....	44
Farmhand Company, The.....	54	Ogilvie Flour Mills Co. Ltd.....	9
Federal Grain Ltd.....	14	Palm Dairies Ltd.....	19
Federated Co-operatives Ltd.....	10	Paterson, N.M., and Sons Ltd.....	62
Feed-Rite Mills Ltd.....	36	People's Co-operative Ltd.....	14
Gateway Service.....	40	Pioneer Feeds Ltd.....	34
Hambley Hatcheries Ltd.....	62	Pioneer Grain Co. Ltd.....	35
Hart-Emerson Simon Ltd.....	12	Pony Corral.....	62
Inland Steel and Forging Ltd.....	12	Royal Alex.....	60
International Harvester Co. of Canada Ltd.....	4	R.O.P. Breeders Hatchery.....	12
Flannigan, G.H., Commission Agents.....		St. Regis Hotel.....	62
James Richardson & Sons.....	54	Standard Chemicals.....	50
Line Elevators Farm Service.....	20	Steel Briggs Seeds Ltd.....	40
MacLeod's Ltd.....	36	Thiessen Bus Lines Ltd.....	62
Malmgren Mfg. Co. Ltd.....	15	United Grain Growers Ltd.....	2
Manitoba Agricultural Graduates.....	44	University Barbershop.....	16
Manitoba Co-operative		University of Manitoba Book Department.....	52
Honey Producers Ltd.....	22	Winnipeg Grain Exchange.....	
	inside back cover	

Support the Advertisers of this Publication

They Stand Ready to Serve You

LESS FREEDOM and LOWER INCOMES

This is the prospect for Canadian grain producers according to Dr. Cecil Haver of MacDonald College, Ste. Anne de Bellevue, Quebec, speaking at the Annual Meeting of the Agricultural Institute of Canada in Winnipeg, in 1959, when he said:

The flight from the free market to a more planned economy suggests that we may receive for our pains less freedom and a lower relative income than would otherwise be the case.

Greater use of the facilities of the market place can provide enlarged opportunities for the sale of the products of prairie farmers.

